



Capital Adequacy Framework

(Standardised Approach)

Prudential Supervision Department
Document BS2A

Issued: November 2007

Ref #3023654

Table of Contents

Part 1 – Introduction	3
Part 2 – Capital definition	4
Part 3 – Capital ratios.....	11
Part 4 – Credit risk	12
Subpart 4A— Standardised rating grades	12
Credit ratings	12
Rating grades	14
Subpart 4B— Risk weights for on-balance sheet exposures.....	16
Subpart 4C— Risk weights for off-balance sheet exposures.....	25
Subpart 4D— Market related contracts.....	27
Over-the-counter derivative contracts	27
Bilateral netting of market related contracts.....	30
Interpretation	31
Part 5 – Credit risk mitigation.....	35
Collateral	36
Guarantees	43
Credit derivatives.....	46
On-balance sheet netting	49
Part 6 – Funds management and securitisation.....	52
Explicit Risk	53
Implicit Risk	54
Funding Risk	55
Part 7 – Insurance business	56
Implicit risk – minimum separation requirements.....	57
Part 8 – Loan transfers	60
Part 9 – Operational risk	62
Part 10 – Market risk exposure	65

Part 1 – Introduction

1. Introduction to Framework

This document sets out the methodology to be used by locally incorporated registered banks that have adopted the standardised approach for calculating capital requirements. This methodology is to be used for the purposes of determining these banks' compliance with conditions of registration relating to capital and for disclosing information about capital.

2. General requirements

Where questions arise as to whether or not particular arrangements come within the ambit of the definitions set out in this document, attention should be directed to the substance of the arrangement, not merely the legal form.

3. Application

- (1) A registered bank that has adopted the standardised approach must use this methodology to calculate the capital ratios both for the banking group and for the registered bank as defined in this section.

Banking group

- (2) For the purpose of calculating capital ratios, the banking group is as defined for the purposes of the registered bank's conditions of registration (subject to any adjustments required as a result of the bank's involvement in insurance, securitisation or funds management activities).

Registered Bank

- (3) For the purposes of calculating capital ratios for the registered bank on a solo basis, subsidiaries which are both wholly owned and wholly funded by the registered bank are to be consolidated with the registered bank. In this context wholly funded by the registered bank means there are no liabilities (including off-balance sheet obligations) to anyone other than:
- (a) the registered bank;
 - (b) the Inland Revenue Department; or
 - (c) trade creditors, where aggregate exposure to trade creditors does not exceed 5% of the subsidiary's shareholders funds.
- (4) Wholly owned by the registered bank means all equity issued by the subsidiary is held by the registered bank.
- (5) Where there is a full, unconditional, irrevocable cross guarantee between a subsidiary and the bank, the subsidiary may be consolidated with the registered bank for the purposes of calculating the bank's solo capital position.

Part 2 – Capital definition

4. Introduction to Part 2

The following sections provide a definition of capital to be used in calculating capital adequacy ratios.

5. Capital

Capital is defined as tier one capital plus tier two capital less deductions from total capital.

6. Tier one capital

(1) Tier one capital is the only form of capital which is permanently and freely available to absorb unanticipated losses without the bank being obliged to cease trading. It is the proprietors' contribution to the bank and as such it represents an ongoing commitment to the business.

(2) Tier One Capital is defined as:

(a) Issued and fully paid up ordinary share capital. For the purposes of this requirement, ordinary share capital is defined as share capital with the following characteristics:

- (i) Holders of the shares have full voting rights.
- (ii) Holders of the shares have no preferential or predetermined rights to distributions of capital or income.
- (iii) The shares are not redeemable as defined in section 68 of the Companies Act 1993.

(b) Perpetual fully paid up non-cumulative preference shares subject to the following requirements:

- (i) They are not redeemable as defined in section 68 of the Companies Act 1993 and not repayable or redeemable at the option of the holder.
- (ii) Dividends must be able to be waived where the financial condition of the bank would not support payment (for example when dividends are not being paid on ordinary shares). Dividends so waived must not cumulate.
- (iii) Preference shares which are subject to arrangements for resetting of the dividend margin will not qualify for inclusion in tier one capital, even if subject to an overall cap.
- (iv) Perpetual non-cumulative preference shares without full voting rights may not constitute more than 25% of tier one capital.

(c) Revenue and similar reserves includes capital redemption reserves, general reserves of retained earnings and other reserves which are created or increased by appropriations of retained earnings. It also includes share premium reserves arising from tier one shares.

Reserves that are earmarked to particular assets or particular categories of banking activities, or on account of any assessed likelihood of loss do not qualify as tier one capital.

The following items must not be included in tier one capital:

- (i) Cumulative gains and losses on cash flow hedges which have been recognised directly in equity, unless the cash flow hedge is against an available-for-sale item on which fair value gains and losses are recognised directly in equity.
 - (ii) Unrealised gains and losses on liabilities designated at fair value through profit and loss that arise from changes in an institution's own credit risk.
 - (iii) Any fair value gains and losses relating to financial instruments for which a fair value cannot reliably be calculated, except that a fair value loss which has arisen from credit impairment on a loan and which has been recognised in audited retained earnings must in all cases be reflected in tier one capital.
 - (iv) Revaluation reserves that are included in upper tier two capital (see section 8(1)(b)).
 - (v) Any surplus, net of any associated deferred tax liabilities, in any defined benefit superannuation fund sponsored by the registered bank (or, where applicable, another entity in the banking group) as employer.
- (d) Current period's audited retained earnings

Audited retained earnings are those which have been subject to audit or review by the bank's auditor. Retained earnings should be reported net of any appropriations such as tax payable, dividends to be paid or transfers to other reserves.

- (e) Tier one minority interests (not applicable for calculating the registered bank's solo capital ratio)

These are claims by outside interests in the ordinary share capital of any partly owned subsidiary company which is consolidated for the purposes of calculating the banking group's capital ratios.

- (f) Less: Deductions from tier one capital:
- (i) Goodwill and other intangible assets.
 - (ii) Current year's losses (including unaudited losses).
 - (iii) Future tax benefits arising from income tax losses (i.e. income tax loss carry forwards).
 - (iv) Net future tax benefits arising from timing differences, to the extent that an income tax loss carry forward would have occurred if tax deductions were available in the current year. In practice this means that net future tax benefits arising from timing differences are allowable, i.e. need not be deducted from capital, up to the amount of the tax obligation on the current year's (or previous 12 month period's) income, as assessed for income tax purposes.

In cases where the current year's assessable income is negative the full amount of the net future tax benefit arising from timing differences should be deducted from capital.

- (v) Credit enhancements provided to associated funds management and securitisation schemes (see sections 94 to 102 for further details).
 - (vi) Credit enhancements provided to affiliated insurance groups which have not been expensed (see sections 106 to 114 for further details).
 - (vii) The full amount of funding provided to an affiliated insurance group, in cases where that funding exceeds the 5% funding limit allowable in terms of section 109, or where the minimum separation requirements of sections 106 to 114 are not otherwise met.
 - (viii) Aggregate funding provided to all affiliated insurance groups and associated funds management and securitisation vehicles, in cases where that funding exceeds the 10% of tier 1 capital limit allowable under sections 103 and 109(g).
 - (ix) Advances of a capital nature provided by the banking group to connected persons, as determined in accordance with Connected Exposures Policy BS8.
- (3) Assets deducted from tier one capital should not be included in risk weighted exposures.

7. Tier two capital

- (1) Tier two capital is capital which has some of the attributes of tier one capital, but which is restricted in its ability to absorb losses other than in a winding up.
- (2) Tier two capital is divided into upper tier two capital and lower tier two capital. Upper tier two capital has no fixed maturity while lower tier two capital has a limited lifespan.
- (3) Tier two capital provides a useful supplement to tier one capital or equity. However, because there are significant deficiencies in its ability to provide protection for depositors and other ordinary creditors, its inclusion in capital is restricted.
- (4) For the purpose of calculating capital adequacy ratios, the following restrictions apply:
 - (a) Tier two capital must not exceed 100% of tier one capital.
 - (b) Lower tier two capital must not exceed 50% of tier one capital.
 - (c) Lower tier two capital must be amortised on a straight line basis over the last 5 years of its life such that no more than 20% qualifies for capital adequacy purposes in the final four reporting quarters preceding the quarter in which the capital matures, or is to be redeemed.

8. Upper tier two capital

- (1) Upper Tier Two Capital is defined as:
 - (a) Unaudited retained profits:
 - (i) Unaudited current period's retained profit, net of appropriations such as tax, dividends and transfers to other reserves.
 - (ii) Unrealised gains and losses on liabilities designated at fair value through profit and loss that arise from changes in an institution's own credit risk must not be included in upper tier 2 capital.

- (iii) Fair value gains and losses relating to financial instruments for which a fair value cannot reliably be calculated must not be included in upper tier two capital, except that a fair value loss that has arisen from credit impairment on a loan and which is reflected in unaudited current period's retained profit must in all cases be reflected in upper tier two capital.
- (b) Revaluation reserves:
 - (i) Reserves arising from a revaluation of tangible fixed assets including owner-occupied property, and cumulative fair value gains on investment property, which have been subject to audit or review by the bank's auditor. Cumulative losses below depreciated cost value on any individual property must not be netted against revaluation gains on other property. Such losses impact on tier 1 capital via the accounting treatment, and no regulatory adjustment should be made to that impact.
 - (ii) Foreign currency translation reserves.
 - (iii) Reserves arising from a revaluation of security holdings. Where such reserves have not been incorporated into the accounts, they should be included at a discount of 55% (i.e. at 45% of the value of the reserves).
- (c) Upper tier two capital instruments:
 - (i) Issued and fully paid up perpetual cumulative preference shares (including share premium).
 - (ii) Mandatory convertible notes that convert into ordinary shares of the registered bank at some future date.
 - (iii) Perpetual subordinated debt.
- (2) Capital instruments must meet the following requirements in order to qualify as upper tier two capital instruments:
 - (a) They must have no maturity date.
 - (b) They must not be redeemable or repayable at the option of the holder.
 - (c) Service obligations must be capable of being deferred (rather than waived altogether) until such time as the financial condition of the bank will support payment.
 - (d) In a winding up they must constitute a residual interest, such that no distributions may be made to holders unless and until all actual and contingent obligations to all creditors of the bank have been discharged.
 - (e) The interest or dividend rate must be fixed for the entire term of the debt and the documentation must not allow for the rate to be altered or reviewed except for the following:
 - (i) Where there is a variable rate and where the formula for setting the rate is fixed (for the term of the debt) at the outset. For example, it would be acceptable to specify the interest rate as a fixed margin above a recognised market benchmark such as the bank bill rate.
 - (ii) Where there is a variable rate and where the formula for setting the rate is fixed at the outset and provides for an increase, or increases, in the margin over a benchmark rate (the same benchmark must apply for the

term of the instrument) which cumulatively do not exceed 50 basis points if they occur within ten years, and cumulatively do not exceed 100 basis points over the life of the instrument, if the life is more than ten years.

- (iii) Where the rate is initially fixed and where the documentation provides for an increase, or increases, in that rate which cumulatively do not exceed 50 basis points if they occur within ten years, and cumulatively do not exceed 100 basis points over the life of the instrument, if the life is more than ten years.
- (iv) Where the rate is initially fixed, and where the documentation provides for the ability to switch to a variable rate, and the formula for setting the variable rate is fixed at the outset and provides for an increase or increases in a deemed margin over a reference floating rate and where the increase or increases in the deemed margin cumulatively do not exceed 50 basis points if they occur within 10 years, and cumulatively do not exceed 100 basis points over the life of the instrument if the life is more than 10 years. The deemed margin is the same as the margin between the interest rate on the fixed leg of the instrument and the rate the bank could fix its interest costs in the same currency for the same term as the fixed leg of the instrument at the time the fixed rate is set.
- (f) In the case of subordinated debt a provision whereby repayment is conditional on a solvency test (as defined in section 4 of the Companies Act 1993) applied to both the issuer and the issuer's group will be required. Directors are responsible for deciding whether or not the bank is solvent. However, the solvency test should be subject to scrutiny by an independent party such as an external auditor. This scrutiny may take the form of a "negative assurance" based on the latest audited accounts together with a review by the auditors of post balance date events.
- (g) Where subordinated debt is repayable at the option of the bank, the option must be exercisable only where the directors have resolved that the repayment is in the best interests of the bank.
- (h) In the case of subordinated debt, the agreement should be subject to New Zealand law or a satisfactory equivalent. Where a bank wishes to use other than New Zealand law it will need to satisfy the Reserve Bank that the subordination provisions of the agreement will be effective under that jurisdiction.

9. Lower tier two capital

- (1) Lower tier two capital may not exceed 50 % of tier one capital.
- (2) Lower tier two capital instruments are subject to straight line amortisation (for capital adequacy purposes) in the final five years of their life, such that no more than 20 % will qualify for inclusion during the final four reporting quarters preceding the reporting quarter in which the debt matures or is to be redeemed.

- (3) Lower level tier two capital is defined as:
- (a) Term subordinated debt with an original maturity of five years or more.
 - (b) Other capital elements with original maturity of five years or more. For example, redeemable preference shares.
- (4) In order to qualify as lower tier two capital these instruments must meet the following requirements:
- (a) They must not be repayable or redeemable at the option of the holder. Except that instruments which are repayable at the option of the holder after a fixed period exceeding 5 years will qualify. For capital adequacy purposes the maturity date of the instrument is deemed to be the first date on which the holder can exercise an option to repay.
 - (b) They must rank behind all other creditors in the event of a liquidation, i.e. they must be subordinated and junior in right of payment to the issuer's obligation to all other creditors (excluding other subordinated obligations with which they rank pari passu).
 - (c) The interest or dividend rate must be fixed for the entire term of the debt and the documentation must not allow for the rate to be altered or reviewed except for the following:
 - (i) Where there is a variable rate and where the formula for setting the rate is fixed (for the term of the debt) at the outset. For example, it would be acceptable to specify the interest rate as a fixed margin above a recognised market benchmark such as the bank bill rate.
 - (ii) Where there is a variable rate and where the formula for setting the rate is fixed at the outset and provides for an increase, or increases, in the margin over a benchmark rate (the same benchmark must apply for the term of the instrument) which cumulatively do not exceed 50 basis points if they occur within ten years, and cumulatively do not exceed 100 basis points over the life of the instrument, if the life is more than ten years.
 - (iii) Where the rate is initially fixed and where the documentation provides for an increase, or increases, in that rate which cumulatively do not exceed 50 basis points if they occur within ten years, and cumulatively do not exceed 100 basis points over the life of the instrument, if the life is more than ten years.
 - (iv) Where the rate is initially fixed, and where the documentation provides for the ability to switch to a variable rate, and the formula for setting the variable rate is fixed at the outset and provides for an increase or increases in a deemed margin over a reference floating rate and where the increase or increases in the deemed margin cumulatively do not exceed 50 basis points if they occur within 10 years, and cumulatively do not exceed 100 basis points over the life of the instrument if the life is more than 10 years. The deemed margin is the same as the margin between the interest rate on the fixed leg of the instrument and the rate the bank could fix its interest costs in the same currency for the same term as the fixed leg of the instrument at the time the fixed rate is set.

- (d) In the case of subordinated debt early repayment must be conditional on a solvency test (as defined in section 4 of the Companies Act 1993) applied to the bank, the banking group and the issuer. Directors are responsible for deciding whether or not the bank is solvent. However, the solvency test should be subject to scrutiny by an independent party such as an external auditor. This scrutiny may take the form of a “negative assurance” based on the latest audited accounts together with a review by the auditors of post balance date events.
- (e) In the case of subordinated debt the agreement must be subject to New Zealand law or a satisfactory equivalent. Where a bank wishes to use other than New Zealand law it will need to satisfy the Reserve Bank that the subordination provisions of the agreement will be effective under that jurisdiction.

10. **Deductions from total capital**

- (1) The following items are to be deducted from total capital:
 - (a) In the case of the banking group:
 - Equity investments in unconsolidated subsidiaries of the registered bank.
 - (b) In the case of the registered bank:
 - Equity investments in subsidiaries of the registered bank other than those which are both wholly owned and wholly funded by the registered bank. (See section 3 for a definition of wholly owned and funded).
 - (c) All holdings, whether direct or indirect, of capital instruments issued by other banks where the holdings equal or exceed 10% of the capital of the bank in which the investment is made.
 - (d) Equity investments, whether direct or indirect, of 10% or more in other financial institutions, i.e. companies whose business is substantially the borrowing and lending of money or providing financial services, or both.
 - (e) Unrealised revaluation losses on securities holdings:
 - Revaluation losses which arise where the book value of the securities exceeds the market value but the resulting unrealised loss has not been incorporated into the accounts. In such cases the full value of the difference should be deducted from capital.
 - (f) Cumulative gains and losses on cash flow hedges, which have been recognised directly in tier two capital.
- (2) Assets deducted from total capital should not be included in risk weighted exposures.

Part 3 – Capital ratios

11. Introduction to Part 3

This part sets out the method to be used for calculating the tier one capital ratio and the total capital ratio for the registered bank and the banking group.

12. Tier one capital ratio

Tier one capital ratio = Tier one capital / (risk weighted on and off-balance sheet credit exposures + 12.5 x total capital charge for market risk exposure + 12.5 x total capital requirement for operational risk).

13. Total capital ratio

Total capital ratio = Capital / (risk weighted on and off-balance sheet credit exposures + 12.5 x total capital charge for market risk exposure + 12.5 x total capital requirement for operational risk).

Part 4 – Credit risk

14. Introduction to Part 4

This part sets out the methodology for measuring credit risk exposure.

Subpart 4A— Standardised rating grades

15. Introduction to Subpart 4A

- (1) This subpart sets out the standardised rating grades to be used for risk weighting exposures to credit risk.
- (2) Credit risk exposure is calculated by risk weighting on and off-balance sheet exposures to credit risk according to broad categories of relative credit risk, as set out in this part. For residential mortgages the risk weighting categories take into account loan-to-value ratios at time of origination and lender's mortgage insurance arrangements. For other types of exposure credit ratings from independent credit rating agencies are used as a basis for determining risk weights.
- (3) Note:
 - (a) Assets deducted from capital should not be included in risk weighted exposures.
 - (b) Assets should be reported net of allowances for impairment loss.
 - (c) Where a net (unrealised) gain on foreign exchange contracts or interest rate contracts has been taken to retained earnings via the profit and loss account, the corresponding balance sheet asset should be excluded from risk weighted assets in order to avoid double counting.

Credit ratings

16. Rating agency credit assessments

- (1) Only credit assessments produced by the rating agencies listed in this section may be used for determining rating grades used for risk weighting exposures to credit risk.
- (2) Those rating agencies¹ are:
 - (a) Standard & Poor's.
 - (b) Moody's Investor Services.
 - (c) Fitch Ratings.

17. Credit assessments must be solicited

Credit assessments may be used for determining rating grades only if they have been solicited from a rating agency, and paid for, by:

- (a) the issuer or rated counterparty; or
- (b) a commercial associate of the issuer or rated counterparty.

¹ For details of the criteria the Bank uses for deciding whether or not to approve a credit rating agency see BS1, the Statement of Principles.

18. **Issue-specific credit assessments**

When a rating agency has produced an issue-specific credit assessment of a claim, the rating grade for the claim is determined by the issue-specific credit assessment of that claim.

19. **Inferred assessments**

- (1) Subject to section 20, this section applies when there is no issue-specific credit assessment of a claim.
- (2) This section applies to:
 - (a) unassessed short-term claims on bank issuers;
 - (b) unassessed long-term claims on any issuer, including banks.
- (3) A rating grade for an unassessed claim on an issuer is determined by the credit assessment for another claim on the issuer, if:
 - (a) the unassessed claim ranks pari passu or senior to that other claim in all respects; or
 - (b) both—
 - (i) the unassessed claim does not rank pari passu or senior to that other claim in all respects; and
 - (ii) that other claim has an assessment that maps, via its rating grade, to a less favourable risk weight than that for an unrated claim of the same type.
- (4) A credit assessment of a short-term claim cannot be used to determine the rating grade for a long-term claim, except as specifically provided for.
- (5) For the purposes of these requirements a long-term issuer credit assessment is to be treated as a credit assessment of a senior unsecured long-term claim on the issuer.
- (6) An unassessed claim is a claim for which no issue-specific credit assessment has been produced by a rating agency that is listed in section 16.

20. **Restrictions on the use of inferred assessments**

The following restrictions apply to inferred assessments:

- (a) A credit assessment of a claim denominated in domestic currency must not be inferred from a credit assessment of a claim denominated in a foreign currency.
- (b) A credit assessment of a claim denominated in a foreign currency must not be inferred from a credit assessment of a claim denominated in a domestic currency.
- (c) A credit assessment of a claim on an entity in a corporate group must not be inferred from a credit assessment of a claim on another entity in the same group.

21. **Multiple assessments**

- (1) If there are two credit assessments that apply to a particular claim that relate to different rating grades and different risk weights, the credit assessment that must be

used is the credit assessment that relates to the higher (less favourable) of those rating grades and risk weights.

- (2) If there are three or more credit assessments that apply to a particular claim that relate to different rating grades and more than one risk weight, the credit assessment that must be used is the credit assessment that relates to the higher of the two lowest rating grades.

Rating grades

22. Rating grades for rating agency credit assessments

- (1) The rating grade for a short-term credit assessment is the rating grade determined under section 24 for a short-term assessment produced by a rating agency.
- (2) The rating grade for a long-term credit assessment is the rating grade determined under section 25 for a long-term or issuer assessment produced by a rating agency.

23. “Unrated” grade when no rating agency credit assessment applies

The rating grade for a claim is “unrated” if no credit assessment produced by a rating agency applies to the claim.

24. Ratings for short-term credit assessments

The rating grade for a short-term assessment is the rating grade that corresponds to a rating agency’s credit assessment according to Table 4.1.

Table 4.1
Rating grades for short-term credit assessments

<i>Rating grade</i>	<i>Rating agency credit assessments</i>		
	<i>Standard & Poor’s Corporation</i>	<i>Moody’s Investor Services</i>	<i>Fitch Ratings</i>
1	A-1	P-1	F-1
2	A-2	P-2	F-2
3	A-3	P-3	F-3
4	Other	Other	Other

25. **Rating grades for long-term assessments**

The rating grade for a long-term or issuer credit assessment is the rating grade that corresponds to the rating agency's credit assessment according to Table 4.2.

Table 4.2
Rating grades for long-term and issuer credit assessments

<i>Rating grade</i>	<i>Rating agency credit assessments</i>		
	<i>Standard & Poor's Corporation</i>	<i>Moody's Investor Services</i>	<i>Fitch Ratings</i>
1	AAA AA+ AA AA-	Aaa Aa1 Aa2 Aa3	AAA AA+ AA AA-
2	A+ A A-	A1 A2 A3	A+ A A-
3	BBB+ BBB BBB-	Baa1 Baa2 Baa3	BBB+ BBB BBB-
4	BB+ BB BB-	Ba1 Ba2 Ba3	BB+ BB BB-
5	B+ B B-	B1 B2 B3	B+ B B-
6	CCC+ CCC CCC- CC C D	Caa1 Caa2 Caa3 Ca C	CCC+ CCC CCC- CC C D

Subpart 4B— Risk weights for on-balance sheet exposures

26. Introduction to subpart 4B

This subpart sets out the methodology for calculating the risk weights for on-balance sheet credit exposures.

27. Cash

(1) A 0% risk weight applies to:

- (a) notes and coins held on site; and
- (b) gold bullion held:
 - (i) in own vaults; or
 - (ii) on an allocated basis and backed by bullion liabilities.

(2) Cash items in the process of collection from banks are to be treated as short-term bank claims.

28. Claims on sovereigns and central banks

(1) A 0% risk weight applies to a claim on the Crown (as defined in the Public Finance Act 1989) or the Reserve Bank of New Zealand that is denominated in New Zealand dollars.

(2) The risk weight for a claim on the Crown or the Reserve Bank of New Zealand that is not denominated in New Zealand dollars or for a claim on any other sovereign or its central bank is the risk weight that corresponds to the rating grade for the claim in Table 4.3.

(3) If there is no credit assessment for a central bank, a credit assessment for its sovereign may be used to infer a rating grade for the central bank.

Table 4.3
Risk weights for claims on other Sovereigns and their
central banks

<i>Rating grade</i>	<i>Risk weight (%)</i>
1	0
2	20
3	50
4	100
5	100
6	150
unrated, if the risk weight for a short-term claim on the issuer is 150%	150
other unrated	100

29. **Claims on public sector entities**

The risk weight for a claim on a public sector entity is the risk weight that corresponds to the rating grade in Table 4.4 for a claim on the sovereign of the country in which the public sector entity is located.

Table 4.4
Risk weights for claims on public sector entities

<i>Sovereign rating grade</i>	<i>Risk weight (%)</i>
1	20
2	50
3	100
4	100
5	100
6	150
other unrated	100

30. **Multilateral development banks and other international organisations**

(1) A 0% risk weight applies to a claim on the following multilateral development banks and international organisations—

- (a) International Bank for Reconstruction and Development;
- (b) International Finance Corporation;
- (c) Asian Development Bank;
- (d) African Development Bank;
- (e) European Bank for Reconstruction and Development;
- (f) Inter-American Development Bank;
- (g) European Investment Bank;
- (h) European Investment Fund;
- (i) Nordic Investment Bank;
- (j) Caribbean Development Bank;
- (k) Islamic Development Bank;
- (l) Council of Europe Development Bank;
- (m) Bank for International Settlements;
- (n) International Monetary Fund;
- (o) European Central Bank;

- (p) European Community;
 - (q) International Finance Facility for Immunization.
- (2) The risk weight for a claim on any other multilateral development bank or international organisation is the risk weight that corresponds to the rating grade for the claim in Table 4.5.

Table 4.5
Risk weights for claims on multilateral development
banks or other international organisations

<i>Rating grade</i>	<i>Risk weight (%)</i>
1	20
2	50
3	50
4	100
5	100
6	150
unrated, if the risk weight for a short-term claim on the issuer is 150%	150
other unrated	50

31. Bank – short-term claims

- (1) If there is an issue-specific credit assessment of a short-term claim on a bank, the risk weight for the claim is the risk weight that corresponds to the short-term issue-specific rating grade for the claim in Table 4.6.
- (2) If there is no issue-specific credit assessment of a short-term claim with an original and effective maturity of 3 months or less, and the counterparty bank has no other rated short-term claims from which a credit assessment can be inferred, the risk weight for the claim is the preferential risk weight derived from Table 4.7.
- (3) The risk weight for any other short-term claim on a bank with an original and effective maturity of 3 months or less is the greater of:
 - (a) the risk weight for another rated short-term claim on the bank derived from Table 4.6; and
 - (b) the preferential risk weight derived from Table 4.7.
- (4) The risk weight for a short-term claim on a bank with an original and effective maturity of more than 3 months for which there is no issue-specific assessment is the greater of:
 - (a) the risk weight for another rated short-term claim on the bank, derived from Table 4.6; and
 - (b) the risk weight for a long-term claim on the bank, derived from Table 4.8.

Table 4.6
Risk weights for short-term claims on banks

<i>Short-term issue-specific rating grade</i>	<i>Risk weight (%)</i>
1	20
2	50
3	100
4	150

Table 4.7
Preferential risk weights for short-term claims on banks

<i>Rating grade of the issuer</i>	<i>Preferential risk weight for short-term claims with an original maturity of 3 months or less (%)</i>
1	20
2	20
3	20
4	50
5	50
6	150
unrated, if the risk weight for another short-term claim on the issuer is 50%	100
unrated, if the risk weight for a short-term claim on the issuer is 150%	150
other unrated	20

32. **Bank – long-term claims**

The risk weight for a long-term claim on a bank is the risk weight that corresponds to the rating grade for the claim in the Table 4.8.

Table 4.8
Risk weights for long-term claims on banks

<i>Rating grade</i>	<i>Risk weight (%)</i>
1	20
2	50
3	50
4	100
5	100
6	150
unrated, if the risk weight for a short-term claim on the issuer is 150%	150
other unrated	50

33. **Bank – sovereign ceiling for unrated claims**

The risk weight for an unrated claim is the greater of:

- (a) the risk-weight for the claim under section 31 or 32; and
- (b) the risk weight of the sovereign territory in which the bank is incorporated.

34. **Claims on corporates**

- (1) The risk weight for a short-term claim on a corporate is the risk weight that corresponds to the issue-specific rating grade for the claim in Table 4.9.

Table 4.9
Risk weights for short-term claims on corporates

<i>Short-term issue-specific rating grade</i>	<i>Risk weight (%)</i>
1	20
2	50
3	100
4	150
unrated, if the risk weight for another short-term claim on the issuer is 150%	150
other unrated	100

- (2) The risk weight for a long-term claim on a corporate is the risk weight that corresponds to the rating grade for the claim in Table 4.10.

Table 4.10
Risk weights for long-term claims on corporates

<i>Rating grade</i>	<i>Risk weight (%)</i>
1	20
2	50
3	100
4	100
5	150
6	150
unrated, if the risk weight for a short-term claim on the issuer is 150%	150
other unrated	100

35. **Corporate – sovereign ceiling for unrated claims**

The risk weight for an unrated claim on a corporate is the greater of:

- (a) the risk weight determined for the claim under section 34; and
- (b) the risk weight of the sovereign territory in which the corporate is incorporated.

36. **Residential mortgage loans not past due**

- (1) The risk weight for a residential mortgage loan that is not a 90 day past due asset is the risk weight that corresponds to the loan-to-valuation ratio and lender’s mortgage insurance conditions set out in Table 4.11.

Table 4.11
Risk weights for claims secured by first mortgages over residential property

<i>Loan-to-valuation ratio</i>	<i>Risk weight (%)</i>	
	<i>if there is lender’s mortgage insurance that qualifies under section 38</i>	<i>if there is no lender’s mortgage insurance or lender’s mortgage insurance that does not qualify under section 38</i>
does not exceed 80%	35	35
exceeds 80% and not 90%	35	50
exceeds 90% and not 100%	50	75

- (2) Residential mortgage loans with loan-to-valuation ratios of more than 100% are treated as “other assets” and risk weighted at 100%.

37. **Loan-to-valuation ratio**

- (1) The loan-to-valuation ratio for a residential property is calculated by the formula:

$$\text{Loan-to-valuation ratio} = \frac{\text{loan value}}{\text{property value}} \times 100$$

- (2) In the formula—
 - (a) “loan value” is the total amount, as at balance date, of:
 - (i) all claims secured by way of first ranking mortgage over the residential property; and
 - (ii) all undrawn commitments to the borrower that when drawn down will be secured by way of first ranking mortgage over the residential property:

- (b) “property value” is the value of the residential property determined under a bank’s residential property valuation policy when a residential mortgage loan is originated.

38. Conditions for qualifying lender’s mortgage insurance

- (1) Lender’s mortgage insurance that meets the conditions in subsection (2) and (3) or is provided by Housing New Zealand Corporation qualifies for the purpose of sections 36 and 39.
- (2) The insurance provider providing the lender’s mortgage insurance must have an insurer financial strength rating provided by Standard & Poor’s, Moody’s Investor Services or Fitch Ratings listed in Table 4.12.

Table 4.12
Insurer Financial Strength Ratings

<i>Standard & Poor’s</i>	<i>Moody’s Investor Services</i>	<i>Fitch Ratings</i>
AAA	Aaa	AAA
AA+	Aa1	AA+
AA	Aa2	AA
AA-	Aa3	AA-
A+	A1	A+
A	A2	A

- (3) The lender’s mortgage insurance used in any case must cover all losses realised in a default on the mortgage up to an amount of no less than 40% of the loan value.
- (4) “Loan value” has the same meaning in this section as defined in section 37.

39. Past due residential mortgage loans

- (1) The risk weight for a residential mortgage loan without qualifying mortgage insurance that is a 90 day past due asset is 100%.
- (2) The risk weight for a residential mortgage loan with qualifying mortgage insurance is the risk weight that corresponds to the loan-to-valuation ratio and lenders’ mortgage insurance conditions as set out in table 4.11.

40. Other past due loans

- (1) The risk weights in this section apply to the amount of other 90 day past due assets, net of any allowance for impairment, not secured by eligible collateral or guarantee.
- (2) The risk weight is either:
- (a) 150%, if the allowance for impairment for the loan is less than 20% of the outstanding amount of the loan; or
- (b) 100%, if the allowance for impairment for the loan is equal to or greater than 20% of the outstanding amount of the loan.

41. **Equity**

The risk weights for equity holdings are:

- (a) 300% if they are publicly traded; and
- (b) 400% for all others.

42. **Other assets**

A 100% risk weight applies for an asset not specifically provided for under sections 27 to 41.

43. **Definitions for subpart 4B**

In this subpart—

- (a) “Crown entity” has the same meaning as in the Crown Entities Act 2004:
- (b) “corporate” includes:
 - (i) a securities firm;
 - (ii) an insurance company;
 - (iii) a state enterprise;
 - (iv) a Crown entity:
- (c) “independent valuer” means a person who is not associated with a person who has an interest in the residential property for which a valuation is made and who is:
 - (i) a registered valuer as defined in the Valuers Act 1948; or
 - (ii) another person approved to provide valuation services by rules made under the Rating Valuations Act 1998:
- (d) “public sector entity” means a local authority as defined for the purposes of the Local Government (Rating) Act 2002:
- (e) “residential mortgage loan” means a loan fully secured by a first ranking mortgage over a residential property used primarily for residential purposes either by the mortgagor or a tenant of the mortgagor:
- (f) “residential property valuation policy” means a policy governing how a property value is determined for a residential mortgage loan that—
 - (i) is approved by a bank’s board of directors; and
 - (ii) includes guidance on the use of—
 - (A) a valuation produced by an independent valuer; and
 - (B) the purchase price of a residential property:
- (g) “state enterprise” has the same meaning as in the State-Owned Enterprises Act 1986:
- (h) “90 day past due asset” has the same meaning as in Appendix E of the New Zealand Equivalent to International Financial Reporting Standard 7 – Financial Instruments: Disclosure (NZ IFRS 7).

Subpart 4C— Risk weights for off-balance sheet exposures

44. Introduction to subpart 4C

This subpart sets out the methodology to be used for converting off-balance sheet exposures other than market related contracts into credit equivalent amounts, and for applying risk weights to the credit equivalent amounts.

45. Calculating credit equivalent amounts for off-balance sheet items

- (1) The credit equivalent amount for an off-balance sheet exposure is calculated under the formula:

$$\text{credit equivalent amount} = \frac{\text{credit conversion factor}}{\text{factor}} \times \left(\frac{\text{principal amount}}{\text{amount}} - \frac{\text{provision amount}}{\text{amount}} \right)$$

- (2) In the formula—

- (a) “credit conversion factor” is the credit conversion factor specified in this subpart for the off-balance sheet exposure;
- (b) “principal amount” is the principal amount of the off-balance sheet exposure; and
- (c) “provision amount” is the total amount of any allowance for impairment for the exposure.

46. Credit conversion factors for off-balance sheet exposures

- (1) The credit conversion factors for off-balance sheet exposures are set out in Table 4.14.
- (2) The risk weight for a non-market related off-balance sheet exposure is that which applies to a claim on the counterparty to the transaction or to the underlying asset type, as specified in Table 4.14.

Table 4.14
Credit conversion factors

<i>Type of transaction</i>	<i>Credit conversion factor (%)</i>	<i>Risk weight by:</i>
direct credit substitute	100	counterparty type
asset sale with recourse	100	type of asset, or issuer of securities as appropriate
forward asset purchase	100	type of asset
commitment with certain draw-down	100	counterparty type
note issuance facility	50	counterparty type
revolving underwriting facility	50	counterparty type
performance-related contingency	50	counterparty type
trade-related contingency	20	counterparty type
placements of forward deposits	100	counterparty type
other types of commitment	see subsection (3)	see subsection (5)

- (3) The credit conversion factors for other commitments are set out in Table 4.15.

Table 4.15
Credit conversion factors for other commitments

<i>Feature of commitment</i>	<i>Credit conversion factor (%)</i>
original maturity is more than 1 year	50
original maturity is less than or equal to 1 year	20
cancels automatically when the creditworthiness of the counterparty deteriorates or which can be cancelled unconditionally at any time without prior notice	0

- (4) Commitments to provide off-balance sheet facilities should be assigned the lower of the two applicable credit conversion factors.
- (5) The risk weight for the other types of commitments, to which subsection (3) applies, is the risk weight for the counterparty to the transaction.

Subpart 4D— Market related contracts

47. Introduction to subpart 4D

This subpart sets out the methodology for calculating the credit equivalent amount for market related contracts not covered by a bilateral netting agreement and the methodology to be used for market related contracts that are covered by a bilateral netting agreement.

Over-the-counter derivative contracts

48. Calculation of credit equivalent amounts for over-the-counter derivative contracts

- (1) This section applies to over-the-counter derivative contracts that are not covered by a bilateral netting agreement.
- (2) The credit equivalent amount for an over-the-counter derivative contract is calculated by marking it to its current market value and adding on an amount for potential future risk.
- (3) Unless subsection (5) applies, the credit equivalent exposure amount for a contract is calculated under the formulae—

$$\begin{aligned} \text{credit equivalent amount} &= \text{current exposure amount} + \text{potential future exposure amount} \\ \text{potential future exposure amount} &= \text{exposure amount} \times \text{future risk factor} \end{aligned}$$

- (4) In the formulae:
 - (a) “current exposure amount” is the greater of—
 - (i) zero; and
 - (ii) the current marked-to-market replacement cost for the contract.
 - (b) “exposure amount” is the effective notional principal amount of the contract. This is the stated notional principal amount unless the stated notional principal amount is leveraged or enhanced by the structure of the transaction. For example, a stated notional amount of \$1 million with payments based on an internal rate of two times the bank bill rate would have an effective notional amount of \$2 million.
 - (c) “future risk factor” is the conversion factor for the potential future credit exposure over the remaining life of the contract under sections 49 and 50.
- (5) For an over-the-counter derivative contract that is a single currency floating-to-floating interest rate swap contract, the credit equivalent amount is the current exposure amount as defined in subsection (4)(a) – i.e. it does not include the potential future exposure amount in subsection (3).

49. Future risk adjustments for over-the-counter derivative contracts

- (1) This section applies to an exposure that arises from:
- (a) a derivative contract traded over-the-counter; or
 - (b) bilaterally netted forward transactions.
- (2) The conversion factor for an exposure is the factor that corresponds to the type and residual maturity of the contracts that give rise to the exposure, as set out in Table 4.16.

Table 4.16
Conversion factors

<i>Type of contract</i>	<i>Conversion factor (%) for an exposure with a residual maturity:</i>		
	<i>less than or equal to 1 year</i>	<i>more than 1 year and less than or equal to 5 years</i>	<i>more than 5 years</i>
exchange rate contract	1	5	7.5
interest rate contract	0	0.5	1.5
equity contract	6	8	10
precious metal contract	7	7	8
other commodity contract	10	12	15

- (3) The conversion factor for contracts with multiple exchanges of principal is the factor in subsection (2) multiplied by the number of remaining payments in the contract.
- (4) For contracts that are structured to settle outstanding exposure on specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity is the time until the next reset date.

50. Future risk adjustments for credit derivative contracts

- (1) This section applies to an exposure that arises from single name credit derivatives in the trading book.
- (2) The conversion factor for an exposure under this section is determined under Table 4.17.

Table 4.17
Conversion factors

<i>Type of transaction</i>		<i>Conversion factor (%) for a transaction including:</i>	
		<i>a qualifying reference obligation</i>	<i>a non-qualifying reference obligation</i>
total return swap	buy	5	10
	sell	5	10
credit default swap	buy	5	10
	sell	see subsection (3)	

- (3) The credit conversion factor for an off-balance sheet exposure arising from selling a credit default swap is the factor that corresponds to the conditions for the transaction in Table 4.18.

Table 4.18
Credit conversion factors for selling credit default swaps

<i>Conditions for credit default swap transaction</i>	<i>Conversion factor (%) for a transaction that includes:</i>	
	<i>a qualifying reference obligation</i>	<i>a non-qualifying reference obligation</i>
if a credit default swap transaction is subject to close-out upon the insolvency of the protection buyer when the reference entity is still solvent	5	10
other credit default swap transactions	0	0

51. The exposure amount of a credit default swap transaction that has a conversion factor greater than zero under section 49 is limited to the amount of any unpaid premium.

Bilateral netting of market related contracts

52. **Conditions for the bilateral netting of transactions**

Banks may net claims arising from forwards, swaps, options and similar derivative contracts when those claims are subject to a legally valid form of bilateral netting contract, other than a payments netting contract, if the following conditions are met.

- (a) The bilateral netting agreement or contract with the counterparty must be in writing.
- (b) The agreement must create a single legal obligation in relation to the counterparty for all individual contracts able to be netted under the agreement.
- (c) Should the counterparty not meet the terms of the agreement due to a default, insolvency, bankruptcy, statutory management, liquidation or similar circumstance, the agreement must ensure that there is an exposure that is either a single claim to receive or a single obligation to pay only the net amount that results from the sum of the positive and negative mark-to-market values of the individual contracts covered by the agreement.
- (d) Written and reasoned legal opinions must be held that conclude with a high degree of certainty that, in the event of a legal challenge, the exposure under the agreement would be found to be the net amount under the laws of all relevant jurisdictions including:
 - (i) the law of the jurisdiction in which the counterparty is incorporated or chartered and if a foreign branch of the counterparty is involved, the law of the jurisdiction in which the branch is located;
 - (ii) the law that governs the individual transactions covered by the agreement; and
 - (iii) the law that governs any contract or agreement necessary to effect the bilateral netting agreement.
- (e) Procedures must be in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes to relevant laws.
- (f) The agreement must not contain walkaway clauses which permit the non-defaulting party to make only limited or no payment to the estate of the defaulter, even if the defaulter is a net creditor under the agreement.

53. **Calculating current exposures for bilaterally netted transactions**

- (1) The credit equivalent exposure amount for bilaterally netted forward transactions is calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal.
- (2) The add-on for netted transactions is A_{Net} and is calculated using the formula:

$$A_{Net} = 0.4 \times A_{Gross} + 0.6 \times NGR \times A_{Gross}$$

- (3) In the formula—
- (a) “ A_{Gross} ” is the sum of the individual add-on factors of all transactions subject to the bilateral netting agreement, calculated using the conversion factors set out in Table 4.16.
 - (b) “NGR” is the ratio of net current replacement cost to gross current replacement cost.

54. Bilateral netting for contracts with same currency and maturity

- (1) This section applies to forward foreign exchange contracts and other similar contracts:
- (a) denominated in the same currency;
 - (b) maturing on the same date; and
 - (c) with a notional principal that is equivalent to their cash flows.
- (2) For the purposes of calculating the potential future credit exposure to a netting counterparty for forward exchange contracts and other similar contracts in which notional principal is equivalent to cash flows, the notional principal is the amount of net receipts that fall due on a value date, in a currency.

Interpretation

55. Definitions for terms used in subparts 4C and 4D

In subparts 4C and 4D,—

- (a) “asset sale with recourse” means an arrangement whereby loans or other assets are sold to a third party, but the seller retains an obligation to assume the credit risk on the asset under certain prescribed circumstances e.g. a deterioration in the value or credit quality of the asset:
- (b) “commitment with certain draw down” means an agreement to purchase assets or acquire claims which are certain to be drawn down at a future date, and includes—
 - (i) a forward asset purchase;
 - (ii) a partly paid-up share or security; and
 - (iii) a forward deposit:
- (c) “commodity”—
 - (i) means something that is traded:
 - (ii) includes—
 - (A) precious metals;
 - (B) base metals;
 - (C) non-precious metals;
 - (D) energy;
 - (E) agricultural assets; and
 - (F) other physical things:
 - (iii) does not include gold:

- (d) “credit derivative contract” means a contract entered into by 2 parties under standard ISDA credit derivative documentation with the intention to transfer credit risk in relation to a reference obligation from one party (the protection buyer) to the other party (the protection seller) and includes a related derivative contract:
- (e) “credit default swap” means a credit derivative contract under which the protection buyer pays a fee to the protection seller in return for compensation in the event of a default (or similar credit event) by a reference entity:
- (f) “derivative contract” means a financial instrument which is valued on the basis of the value of an underlying exposure; and which includes—
 - (i) a commodity contract;
 - (ii) an exchange rate contract;
 - (iii) an equity contract;
 - (iv) an interest rate contract;
 - (v) a credit derivative contract; and
 - (vi) a related derivative contract:
- (g) “direct credit substitute” means an off-balance sheet exposure that has a risk of loss that is equivalent to a direct claim on the counterparty and includes—
 - (i) bills of exchange;
 - (ii) guarantees of financial obligations;
 - (iii) standby letters of credit; and
 - (iv) risk participations:
- (h) “equity contract” means a contract which is valued on the basis of the value of underlying equities or equity indices and includes related derivative contracts:
- (i) “exchange rate contract”—
 - (i) means—
 - (A) a forward foreign exchange contract, unless subparagraph (i)(iii) applies;
 - (B) a cross-currency interest rate swap contract;
 - (C) a currency option contract; or
 - (D) a similar derivative contract:
 - (ii) includes a related derivative contract which is valued on the basis of the value of gold:
 - (iii) does not include:
 - (A) a contract that has an original maturity which is less than or equal to 14 calendar days, unless subparagraph (i)(ii) applies;
 - (B) a forward exchange rate contract entered into as part of a swap deposit arrangement:
- (j) “interest rate contract” means:
 - (i) a single-currency forward rate contract;
 - (ii) interest rate swap contract;
 - (iii) interest rate option contract; or
 - (iv) a similar derivative contract:

- (k) “note issuance facility” or “revolving underwriting facility” means an arrangement whereby a borrower may drawdown funds up to a prescribed limit over a predefined period by making repeated note issues to the market, and where, if the issue is not fully taken up by the market, the unplaced amount is to be taken up or funds made available by the facility provider.
- (l) “other commodity contract” means a commodity contract, which is valued on the basis of the value of a commodity other than a precious metal, and includes related derivative contracts:
- (m) “over-the-counter transaction” or “contract traded over-the-counter”—
 - (i) means a transaction or contract that is not:
 - (A) traded on an exchange; and
 - (B) subject to daily re-margining requirements; and
 - (ii) includes—
 - (A) an exchange rate contract;
 - (B) an interest rate contract;
 - (C) an equity contract;
 - (D) a precious metal contract; and
 - (E) another commodity contract:
- (n) “placement of forward deposit” means an agreement to place a deposit with another party at an agreed rate of interest on a predetermined future date:
- (o) “precious metal” includes silver, platinum and palladium but excludes gold:
- (p) “precious metal contract” means a commodity contract which is valued on the basis of the value of a precious metal:
- (q) “related derivative contract” means a derivative contract that is—
 - (i) a forward contract;
 - (ii) a swap contract;
 - (iii) an option contract; or
 - (iv) a similar contract:
- (r) “repo-style transaction” means a transaction in which a person agrees—
 - (i) a repurchase transaction: to sell a security to a counterparty for an amount of money and repurchase the security from the counterparty, at an agreed price, on an agreed future date;
 - (ii) a reverse repurchase transaction: to buy a security from a counterparty for an amount of money and resell the security at an agreed price on an agreed future date to the counterparty;
 - (iii) a securities lending transaction: to lend a security to a counterparty and receive an amount of money or another security from the counterparty in exchange as collateral; or
 - (iv) a securities borrowing transaction: to borrow a security from a counterparty and provide an amount of money or other securities to the counterparty in exchange as collateral:

- (s) “swap deposit arrangement” means an arrangement under which, at the same time:
 - (i) a party sells foreign currency at the spot rate against another currency to a counterparty; and
 - (ii) the counterparty deposits the foreign currency with the selling party and enters into a forward exchange rate contract with the party to sell the foreign currency back to the party against another currency, at a specified exchange rate, on a future date:
- (t) “total return swap” means a credit derivative contract under which a protection buyer, during the term of the contract:
 - (i) pays a protection seller all cash flows arising from a reference obligation together with any appreciation in the market value of the reference obligation; and
 - (ii) receives, in return, a spread over a specified index together with any depreciation in the value of the reference obligation:
- (u) “performance-related contingent item”—
 - (i) means an exposure involving an irrevocable obligation to pay a third party in the event that a counterparty fails to fulfil or perform a contractual non-monetary obligation such as delivery of goods by a specified date; and
 - (ii) includes—
 - (A) performance bonds;
 - (B) bid bonds;
 - (C) warranties and indemnities;
 - (D) performance related standby letters of credit; and
 - (E) other guarantees that support obligations relating to a particular transaction:
- (v) “trade-related contingent item” means a contingent liability arising from trade-related obligations which are secured against an underlying shipment of goods and includes documentary letters of credit issued, acceptances on trade bills, shipping guarantees issued and other trade-related contingencies.

Part 5 – Credit risk mitigation

56. Introduction to Part 5

- (1) This part sets out the methodology for credit risk mitigation.
- (2) There are two methods of credit risk mitigation that may be used under this methodology – the simple method and the comprehensive method.
- (3) In the simple method, the risk weight of collateral is substituted for the risk weight of the counterparty for the collateralised portion of an exposure (generally subject to a risk weight floor of 20%). The comprehensive method allows fuller offset of collateral against exposures by effectively reducing the exposure amount by the value ascribed to the collateral.
- (4) Under both the simple and comprehensive methods, the substitution approach is used for eligible guarantees and credit derivatives, adjusted where applicable to take account of currency or maturity mismatches. Under the substitution approach, the risk weight applicable to the credit protection is substituted for the risk weight applicable to the underlying exposure.
- (5) For banking book exposures, the bank must choose either the simple method or the comprehensive method and apply the chosen method to all banking book exposures where recognised credit risk mitigation techniques have been used.
- (6) The comprehensive method must be used for trading book exposures where collateral is pledged against counterparty risk.

57. General requirements for credit risk mitigation

- (1) Credit risk mitigation techniques are recognised under this framework only if they meet the requirements set out in this section. Only recognised credit risk mitigation techniques may be taken into account in determining the risk weight for an exposure.
- (2) No transaction in which recognised credit risk mitigation techniques are used should receive a higher capital requirement than the same transaction where such techniques are not used.
- (3) The effects of credit risk mitigation must not be double counted. Therefore no additional recognition of credit risk mitigation is permitted for claims with an issue-specific rating that already takes into account credit risk mitigation.

58. Credit risk mitigation techniques may be used for the purposes of determining risk weights only if the following documentation requirements are met:

- (a) The documentation used for credit risk mitigation must be binding on all parties and legally enforceable in all relevant jurisdictions.
- (b) The enforceability of the documentation must be verified through periodic legal reviews.

59. The following credit risk mitigants are recognised under this framework:
- (a) collateral posted by a counterparty or by a third party on behalf of the counterparty;
 - (b) guarantees; and
 - (c) credit derivatives.

Collateral

60. **Eligible collateral**

The forms of collateral eligible for credit risk mitigation are:

Cash

- (a) cash on deposit with the lender;
- (b) a certificate of deposit or other similar instrument issued by the lender;

Rated debt securities

- (c) a debt security that has an issue-specific rating agency assessment and is either—
 - (i) a claim on a sovereign, multilateral development bank or other international organisation, public sector entity, bank or corporate that has a rating grade of 1, 2, or 3 (see Tables 4.1 and 4.2) or a risk weighting of 0%; or
 - (ii) a long-term claim on a sovereign that has a rating grade of 1, 2, 3, or 4 (see Table 4.2);

Unrated debt securities

- (d) a debt security that does not have an issue-specific rating agency assessment; and that is—
 - (i) issued by another bank; and
 - (ii) listed on a recognised exchange; and
 - (iii) classified as senior debt; and
 - (iv) issued by a bank that has other rated issues of the same seniority which have a rating grade of 1, 2, or 3.

Equity securities

- (e) An equity security that is included in the NZX 50 or an overseas equivalent.

61. **Minimum requirements for collateral**

- (1) Collateral is recognised for credit risk mitigation purposes if the following minimum requirements are met:
 - (a) There must be a formal written contractual agreement between the lender (or party holding the claim) and the party lodging the collateral which establishes the lender's direct, explicit, irrevocable and unconditional recourse to the collateral.

- (b) The legal mechanism by which collateral is pledged or transferred must ensure that the lender has the right to liquidate or take legal possession of it immediately in the event of the default, insolvency, statutory management, voluntary administration, receivership, or bankruptcy of the counterparty or custodian of the collateral, or where any other credit event permitting enforcement of collateral occurs.
 - (c) The lender must take all steps necessary to fulfil requirements under the law applicable to its interest in the collateral for obtaining and maintaining an enforceable security interest. This includes clear and robust procedures for the immediate liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed and that the collateral can be liquidated promptly.
 - (d) Securities issued by the counterparty or any person related to, or associated with, the counterparty, or by any other person whose credit quality has a material positive correlation with the credit quality of the original counterparty, are not eligible for recognition under this framework.
 - (e) Cash collateral must be lodged with the lender. If cash collateral is in the form of a certificate of deposit or bank bill issued by the lender, the lender must retain physical possession of the instrument until the collateral obligations have been extinguished.
 - (f) Other forms of collateral (i.e. non-cash collateral) must be held by an independent custodian or third party or by the lender. If the collateral is held by someone other than the lender, the lender must ensure that the custodian segregates the collateral from its own assets.
 - (g) If collateral is held by a third party, the third party must indemnify or guarantee the borrower's obligations to the lender in a way that is legally robust.
- (2) Under the simple method for credit risk mitigation, collateral is recognised for credit risk mitigation purposes only if the collateral is pledged for at least the life of the exposure, and is marked to market with a minimum frequency of 6 monthly. The release of collateral must be conditional on the repayment of the exposure. However, collateral may be reduced in proportion to the amount of any reduction in the exposure amount.

62. **Risk weighting of collateralised transaction under the simple method**

- (1) Those portions of claims collateralised by the market value (at the most recent revaluation) of eligible collateral may receive the higher of—
 - (a) the risk weight applicable to the collateral under subpart 4B; or
 - (b) 20%, subject to the exceptions set out in subsection (2).
- (2) The exceptions to the 20% floor on risk weights for collateralised transactions are—
 - (a) A 0% risk weight may be applied to collateralised transactions when the exposure and the collateral are denominated in the same currency and either:
 - (i) the collateral is cash on deposit with the lender; or

- (ii) the collateral is in the form of sovereign or public sector entity securities eligible for a 0% risk weight and the market value of the collateral has been discounted by 20%.
- (b) Repurchase/reverse repurchase agreements and securities lending/borrowing transactions with a core market participant (as defined in section 69) that fulfil the conditions for a zero haircut set out in section 68 (0% haircut) may receive a risk weight of 0%. If the counterparty to the transactions is not a core market participant the transaction must be risk weighted at 10 %.
- (c) Over-the-counter derivative transactions in the banking book may be risk weighted at 0% if:
 - (i) they are marked to market on a daily basis;
 - (ii) they are fully collateralised by cash; and
 - (iii) there is no currency mismatch.
- (d) Over-the-counter derivative transactions collateralised by sovereign or public sector entity securities that qualify for a 0% risk weight, may be risk weighted at 10%.

63. **Comprehensive approach for use of collateral**

- (1) Under the comprehensive approach to credit risk mitigation, the exposure amount is adjusted to take into account the effects of eligible collateral. Using haircuts the bank must adjust both the amount of the exposure to the counterparty (the volatility adjusted exposure amount) and the value of the collateral (the volatility adjusted collateral amount).
- (2) If the exposure and collateral are held in different currencies, the bank must make an additional downwards adjustment to the volatility adjusted collateral amount to take into account possible future fluctuations in exchange rates.
- (3) A capital requirement applies to banks on either side of a collateralised transaction. For example, both repurchase and reverse repurchase agreements are subject to capital requirements. Likewise both sides of a securities lending and borrowing transaction are subject to explicit capital charges, as is the posting of securities in connection with a derivative exposure or other borrowing.
- (4) The difference between the volatility adjusted exposure amount and the volatility adjusted collateral amount (including any required adjustments for foreign exchange movements) is the adjusted exposure amount after credit risk mitigation. The adjusted exposure amount after credit risk mitigation must be risk weighted using the risk weight applicable to the counterparty to the original exposure.
- (5) The size of the required haircuts depends on the type of instrument, type of transaction and the frequency of remargining or revaluing.
- (6) For certain types of repos and reverse repos a 0% haircut may be used to calculate the exposure amount after credit risk mitigation (see the conditions for a zero haircut under section 68).

64. Calculation of adjusted exposure amount for collateralised transactions under the comprehensive approach

- (1) For a collateralised transaction under the comprehensive approach to credit risk mitigation, unless subsection (3) applies, the adjusted exposure amount after risk mitigation is calculated by the formula:

$$E^* = \max\{0, [E \times (1 + H_E) - C \times (1 - H_C - H_{FX})]\}$$

- (2) In the formula—

- (a) “E*” is the adjusted exposure amount after risk mitigation;
 - (b) “E” is the current value of the exposure;
 - (c) “H_E” is the haircut appropriate to the exposure;
 - (d) “C” is the current value of the collateral;
 - (e) “H_C” is the haircut appropriate to the collateral; and
 - (f) “H_{FX}” is the haircut appropriate for currency mismatch between the collateral and exposure.
- (3) For over-the-counter derivatives, “E x (1 + H_E)” in the formula in subsection (1) is replaced by the credit equivalent amount of the over-the-counter derivative calculated using the current exposure (mark-to-market) method – i.e. its replacement cost plus its potential future exposure.

65. Standard supervisory haircuts

- (1) The standard supervisory exposure and collateral haircuts expressed as percentages are as set out in Table 5.1.

Table 5.1
Standard supervisory haircuts

<i>External rating grade for debt securities</i>	<i>Residual maturity</i>	<i>Sovereigns²</i>	<i>Other Issuers³</i>
1 (long-and-short-term)	≤ 1 year	0.5	1
	> 1 year, ≤ 5 years	2	4
	> 5 years	4	8
2 or 3 (long-and-short-term) and unrated bank securities	≤ 1 year	1	2
	> 1 year, ≤ 5 years	3	6
	> 5 years	6	12
4 (long-term)	all	15	n/a
Equities in the NZX 50 or an overseas equivalent		15	
Other equities (including convertible bonds) listed on a recognised exchange		25	
Cash in the same currency ⁴		0	
Currency mismatch		8	

(2) For transactions in which the bank lends non-eligible instruments, the haircut to be applied on the exposure must be the same as that for other equities – i.e. 25%.

66. Adjustments to standard supervisory haircuts where marking to market or re-margining is not undertaken on a daily basis

If remargining or revaluation is not undertaken on a daily basis, the haircut must be scaled up or down depending on the actual number of business days between remargining or revaluations, using the formula in section 67, and the minimum holding periods set out in Table 5.2.

² This includes the international banking agencies and regional development banks qualifying for a zero risk weight.

³ This includes banks, PSEs and corporates.

⁴ Eligible cash collateral.

Table 5.2
Minimum holding periods

<i>Transaction type</i>	<i>Minimum holding period</i>	<i>Condition</i>
repo style transactions	5 business days	daily remargining
other capital market transactions	10 business days	daily remargining
secured lending	20 business days	daily revaluing

67. **Adjustment for haircuts**

- (1) The supervisory haircut for a collateralised exposure is calculated by the formula:

$$H = H_M \times \sqrt{\frac{N_R + (T_M - 1)}{10}}$$

- (2) In the formula—

- (a) “H” is the haircut;
- (b) “H_M” is the haircut for the exposure assuming daily remargining or revaluation;
- (c) “T_M” is the minimum holding period for the type of transaction set out in Table 5.2; and
- (d) “N_R” is the actual number of business days between:
 - (i) remargining, for capital market transactions; or
 - (ii) revaluation, for secured transactions.

68. **Conditions for a zero haircut**

For repos/reverse repos and securities lending / borrowing transactions, where the counterparty is a core market participant (as defined in section 69) a haircut of zero will apply if the following conditions are satisfied:

- (a) The exposure and collateral are both either cash, a sovereign security or public sector entity security qualifying for a 0% risk weight under subpart 4B.
- (b) Both the exposure and collateral are denominated in the same currency.
- (c) Either the transaction is overnight or both the exposure and collateral are marked to market daily and are subject to daily remargining.
- (d) Following a counterparty’s failure to remargin the time that is required between the last mark to market before the failure to remargin and the liquidation of the collateral must not be more than 4 business days.
- (e) The transaction is settled across a settlement system that is regularly used by significant market participants for that type of transaction.

- (f) The documentation covering the agreement is standard ISDA documentation for repos/reverse repos and securities borrowing/lending transactions in the securities concerned.
- (g) The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver a margin call or otherwise defaults then the transaction is immediately terminable.
- (h) Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the bank has an unequivocal legally enforceable right to immediately seize and liquidate the collateral for its benefit.

69. Core market participants

The following entities are considered core market participants:

- (a) the New Zealand Government;
- (b) the Reserve Bank of New Zealand; and
- (c) banks.

70. Maturity mismatch for collateral

- (1) A maturity mismatch exists where the effective residual maturity of the term of lodgement of the collateral is less than the effective maturity of the exposure covered by the collateral.
- (2) For a maturity mismatch, the collateral will only be recognised when the effective residual maturity of the term of lodgement of the collateral is greater than or equal to 12 months. If the effective residual maturity of the term of lodgement of the collateral is less than 12 months, the collateral will not be eligible unless the term of lodgement matches the effective maturity of the underlying exposure. In all cases involving a maturity mismatch, collateral will not be eligible when the effective residual maturity of the term of lodgement is 3 months or less.
- (3) If the effective residual maturity of the term of lodgement of the collateral is less than the effective maturity of the exposure a maturity mismatch adjustment (as detailed in section 72 – adjustment for maturity mismatch) is required for the purpose of calculating risk weighted exposures.

71. Effective maturity

Underlying exposure

- (1) The effective maturity of the underlying exposure is the longest possible remaining time before the counterparty is required to fulfil its obligation, taking into account any grace period.

Collateral

- (2) The effective maturity of the collateral is the shortest possible term of lodgement for the collateral taking into account any clause in the documentation supporting the transaction that may reduce that term.

- (3) If the protection provider has the capacity to reduce the term of lodgement of the collateral, the maturity will always be the first date upon which the protection provider can exercise that discretion.
- (4) If the bank has the discretion to reduce the term of lodgement of the collateral and the terms of the transaction at origination of the exposure contain a positive incentive for the bank to exercise its discretion before contractual maturity, the remaining time to the first date when the discretion can be exercised must be treated as the effective maturity.

72. **Adjustment for maturity mismatch**

- (1) If there is a maturity mismatch between collateral and the exposure secured by the collateral the value of the collateral must be adjusted using the following formula:

$$P_A = P \times (t - 0.25) / (T - 0.25)$$

- (2) In the formula—
 - (a) “P_A” is the value of the collateral adjusted for maturity mismatch;
 - (b) “P” is the collateral amount adjusted for any haircuts;
 - (c) “t” is the lesser of T and the effective residual maturity of the term of lodgement of the collateral expressed in years; and
 - (d) “T” is the lesser of 5 and the effective residual maturity of the exposure expressed in years.

Guarantees

73. **Eligibility of guarantees**

Only guarantees provided by the following are recognised under this framework:

- (a) sovereigns and central banks;
- (b) public sector entities;
- (c) multilateral development banks or other international organisations;
- (d) banks;
- (e) corporates with a rating grade of 1 or 2.

74. **Minimum requirements for guarantees**

Guarantees must meet the following requirements to qualify for use as credit risk mitigation—

- (a) The guarantee must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures so that the extent of the cover is clearly defined and incontrovertible.
- (b) The guarantee must cover all types of payment the obligor is required to make under the documentation including interest, margin payments etc.

- (c) The guarantee must be irrevocable, that is, there must be no clause that would allow the protection provider to cancel cover unilaterally or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure.
- (d) The guarantee must be unconditional, that is, there must be no provisions in the contract that could prevent the protection provider from being obliged to make immediate payment in the event that the original counterparty fails to make payments due.
- (e) On the qualifying default of, non-payment by the counterparty, any monies outstanding under the documentation can be pursued immediately, without the need for legal action to be taken. The guarantor may assume the future payment obligations of the counterparty covered by the guarantee or may make one lump sum payment.

75. Simple / comprehensive method for guarantees

Under either the comprehensive or simple methods, that portion of an exposure covered by an eligible guarantee may be assigned the risk weight of the protection provider. The uncovered portion of the exposure must be assigned the risk weight applicable to the underlying counterparty.

76. Tranched cover for guarantees

If there is partial coverage of an exposure by a guarantee and the lender can only claim on the guarantee if losses exceed the uncovered part of the claim, the exposure must be assigned the risk weight applicable to the underlying counterparty.

77. Currency mismatch for guarantees

- (1) If a guarantee is denominated in a different currency from that in which the exposure is denominated, the amount of the exposure that may be treated as being protected must be reduced by applying an adjustment (or “haircut”) as set out in the following formula:

$$G_A = G \times (1 - H_{FX})$$

- (2) In the formula—
 - (a) “ G_A ” is the amount of the exposure deemed to be protected;
 - (b) “ G ” is the nominal amount of the guarantee; and
 - (c) “ H_{FX} ” is the haircut for a currency mismatch between the guarantee and the underlying exposure determined under subsection (3).
- (3) The haircut for a currency mismatch is—
 - (a) 8% if the guarantee is marked to market on a daily basis; or
 - (b) if the guarantee is marked to market less frequently than daily, 8% scaled up according to the frequency of revaluation using the method in sections 66 and 67.

78. **Maturity mismatch**

- (1) A maturity mismatch exists if the residual maturity of a guarantee is less than the effective maturity of the underlying exposure.
- (2) If there is a maturity mismatch, the guarantee will only be recognised when the residual maturity of the guarantee is greater than or equal to 12 months. If the residual maturity of the guarantee is less than 12 months, the guarantee will not be eligible unless the term of the guarantee is equal to the residual maturity of the underlying exposure.
- (3) In all cases, guarantees with maturity mismatches must not be recognised when they have a residual maturity of three months or less.
- (4) Where the residual maturity of the guarantee is less than the maturity of the exposure a maturity mismatch adjustment will be required for the purposes of calculating risk weighted exposures (see section 80 below).

79. **Effective maturity**

Underlying exposure

- (1) The effective maturity of the underlying exposure is the longest possible remaining time until the counterparty is scheduled to fulfil its obligation, taking into account any grace period.

Guarantee

- (2) The effective maturity of the guarantee is the shortest possible time remaining until the guarantee expires, taking into account any clause in the documentation supporting the transaction that may reduce the term of the guarantee.
- (3) If the guarantor has the capacity to reduce the term of the guarantee, the maturity will always be the first date where the guarantor can exercise its discretion.
- (4) If the beneficiary of the guarantee has the discretion to reduce the term of the guarantee, and the terms of the guarantee contain a positive incentive for it to exercise its discretion before contractual maturity, the remaining time to the first date when the discretion can be exercised will be deemed to be the effective maturity.

80. **Adjustment for maturity mismatch**

- (1) If there is a maturity mismatch between a guarantee and the exposure covered by the guarantee, the following adjustment must be made:

$$P_A = P \times (t - 0.25) / (T - 0.25)$$

- (2) In the formula—
 - (a) “ P_A ” is the value of the guarantee adjusted for maturity mismatch;
 - (b) “ P ” is the guarantee amount adjusted for any haircuts;
 - (c) “ t ” is the lesser of T and the residual maturity of the guarantee expressed in years; and
 - (d) “ T ” is the lesser of 5 and the residual maturity of the exposure expressed in years.

Credit derivatives

81. **Credit derivatives**

- (1) The following credit derivatives are recognised under this framework:
 - (a) Single name credit default and total rate of return swaps that provide credit protection equivalent to guarantees. However, where a bank buys credit protection through a total return swap and records the net value of the asset that is protected (either through reductions in fair value or by an addition to reserves), the credit protection will not be recognised.
 - (b) Cash-funded credit-linked notes issued by the bank against exposures in the banking book which fulfil the criteria for credit derivatives are treated as cash collateralised transactions.
- (2) In order to be recognised for credit risk mitigation purposes the credit derivative contract must meet the following requirements:
 - (a) It must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures so that the extent of cover is clearly defined and incontrovertible.
 - (b) It must be irrevocable. There must be no clause that would allow the protection provider to cancel cover unilaterally or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure.
 - (c) It must be unconditional. There should be no clause in the contract that could prevent the protection provider from being obliged to pay out immediately in the event that the original counterparty fails to make the payments due.
 - (d) There must be sufficient credit risk transfer under the credit derivative contract. At a minimum this requires that credit events under the terms of the credit derivative contract cover:
 - (i) Failure to pay an amount due under the terms of the underlying exposure that is in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation).
 - (ii) The bankruptcy, insolvency, statutory management, administration or receivership of the obligor of the underlying exposure; the inability or failure of the obligor to pay its debts; the obligor's admission in writing that it is unable to pay its debts as those debts become due; or analogous events.
 - (iii) The restructuring of the underlying obligation including forgiveness or postponement of principal, interest, or fees that results in a credit loss event (i.e. charge off, allowance for impairment or similar debit to the profit and loss account). However, where the restructuring of the underlying exposure is not included within the terms of the contract but all other requirements for credit risk transfer are met, 60% of the amount of credit protection purchased or 60% of the underlying exposure, whichever is the lesser, may be recognised for capital adequacy purposes.

- (3) The credit derivative must not terminate prior to the expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay.

82. **Asset mismatch**

- (1) An asset mismatch occurs when a bank has purchased credit protection using a credit derivative and the reference asset specified in the credit derivative contract for the purpose of determining the occurrence of a credit event is different to the underlying exposure which is protected by the credit derivative.
- (2) An asset mismatch for credit risk mitigation purposes is allowed if:
- (a) the reference asset ranks pari passu or more junior in seniority of claim relative to the underlying exposure; and
 - (b) either—
 - (i) the underlying exposure and reference asset are obligations of the same legal entity; or
 - (ii) the underlying exposure is an obligation of an entity that is unconditionally and irrevocably guaranteed by the reference entity to the credit derivative contract and there are legally enforceable cross-default or cross-acceleration clauses in place.

83. **Credit event payments**

- (1) Credit derivatives allowing for cash settlement are recognised for credit risk mitigation purposes only if a robust valuation process is in place to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation.
- (2) If the reference obligation specified in the credit derivative for the purposes of cash settlement is different than the underlying obligation, the resulting asset mismatch is permissible only if:
- (a) The reference obligation ranks pari passu with or is junior to the underlying obligation; and
 - (b) The underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

84. **Maturity of the underlying exposure**

The maturity of the underlying exposure is the longest possible remaining time before the obligor is scheduled to fulfil its obligation, taking into account any applicable grace period.

85. **Maturity of the credit derivative**

- (1) The maturity of the credit derivative is the shortest possible effective maturity taking into account any clause in the contract that may reduce its term. For this purpose any clauses that give the protection seller the capacity to reduce the term of the credit derivative and those that give the purchaser at origination of the contract the discretion and incentive to reduce its term must both be taken into account.

- (2) For credit risk mitigation purposes, credit derivatives, with the exception of cash-funded credit-linked notes, are treated in a similar manner to guarantees. This means that where an underlying exposure is protected by a credit derivative from an eligible protection seller, the portion of the claim that is protected by the credit derivative may be weighted according to the risk weight appropriate to the protection seller. The unprotected portion of the exposure must be risk weighted according to the risk weight of the counterparty.

86. Eligible protection sellers

Credit derivatives may be recognised under this framework if they are provided by eligible guarantors (see section 73).

87. Tranched cover

Where there is partial coverage of an underlying exposure by a credit derivative and the protected portion ranks after the unprotected portion, no credit risk mitigation is recognised under this framework.

88. Credit default and total rate of return swaps

Where credit protection is obtained using a credit default swap referenced to a single reference entity or a total rate of return swap, that portion of the underlying exposure protected by the credit derivative may be risk weighted according to the risk weight of the protection seller.

89. Cash-funded credit-linked notes

Where credit protection is obtained using a credit-linked note that is funded by cash, the exposure must be treated as a cash collateralised transaction.

90. Maturity mismatches

- (1) A maturity mismatch exists where the residual maturity of a credit derivative contract is less than the residual maturity of the underlying exposure.
- (2) If there is a maturity mismatch, a credit derivative is only recognised for credit risk mitigation purposes when the original maturity of the credit derivative is greater than or equal to 12 months. Credit derivatives with an original maturity of less than 12 months will not be eligible unless the term of the credit derivative exactly matches the maturity of the underlying exposure. In all cases where there is a maturity mismatch a credit derivative will not be eligible for credit risk mitigation purposes when the term has a residual maturity of 3 months or less.
- (3) If there is a maturity mismatch and the credit derivative has an original maturity of 12 months or more, the amount of credit protection must be adjusted using the following formula:

$$P_A = P \times (t - 0.25) / (T - 0.25)$$

- (4) In the formula—

- (a) “ P_A ” is the value of the amount of credit protection adjusted for maturity mismatch;

- (b) “P” is the amount of credit protection adjusted for any haircuts under section 91 (in which case $P = G_A$);
- (c) “t” is the lesser of T and the residual maturity of the credit derivative expressed in years; and
- (d) “T” is the lesser of 5 and the residual maturity of the underlying exposure expressed in years.

91. Currency mismatch

- (1) A currency mismatch exists when credit protection provided by a credit derivative is denominated in a different currency to the underlying exposure.
- (2) The amount of the exposure deemed to be protected will be reduced by the application of an adjustment or haircut determined by the formula:

$$G_A = G \times (1 - H_{FX})$$

- (3) In the formula—
 - (a) “ G_A ” is the amount of the exposure deemed to be protected;
 - (b) “G” is the nominal amount of the credit derivative; and
 - (c) “ H_{FX} ” is the haircut for the currency mismatch between the credit derivative and the underlying exposure determined under subsection (4).
- (4) The haircut for a currency mismatch is—
 - (a) 8% if the credit derivative is marked to market on an daily basis; or
 - (b) if the credit derivative is marked to market less frequently than daily, 8% scaled up according to the frequency of revaluation using the method in sections 66 and 67.

On-balance sheet netting

92. On-balance sheet netting of loans and deposits

- (1) This section sets out the requirements for bilateral on-balance sheet netting of loans and deposits.
- (2) On-balance sheet netting is recognised when the following requirements are met:
 - (a) There must be a well founded legal basis for concluding that the bilateral netting agreement is enforceable in each relevant jurisdiction regardless of whether the counterparty is insolvent or bankrupt.
 - (b) The bank must at all times be able to determine the loans and deposits that are subject to the bilateral netting agreement.
 - (c) The bank must monitor and control its roll-off risks.
 - (d) The bank must monitor and control the relevant exposure on a net basis.

- (3) Using the formula in subsection (4), the exposure value for bilateral on-balance sheet netting of loans and deposits is calculated by treating loans as exposures and deposits as cash collateral. The haircuts will be zero unless a currency mismatch exists, in which case standard supervisory haircuts will apply, scaled up if daily mark to market is not conducted.
- (4) The formula for calculating the exposure value for bilateral on-balance sheet netting of loans and deposits is:

$$E^* = \max\{0, [E \times (1 + H_E) - C_A \times (1 - H_{FX})]\}$$

- (5) In the formula in subsection (4),—
- (a) “E*” is the exposure value after risk mitigation;
 - (b) “E” is the current value of the exposure (i.e. the value of the loans) to the counterparty subject to the bilateral netting agreement;
 - (c) “H_E” is the supervisory haircut for the exposure;
 - (d) “H_{FX}” is the supervisory haircut for currency mismatches; and
 - (e) “C_A” is—
 - (i) the value of collateral (deposits), if there is no maturity mismatch between the deposits and the loans; or
 - (ii) if there is a maturity mismatch, the value determined under subsection (6).
- (6) The value of collateral (deposits) adjusted for a maturity mismatch between deposits and loans is calculated by the formula:

$$C_A = C \times (t - 0.25) / (T - 0.25)$$

- (7) In the formula in subsection (6),—
- (a) “C_A” is the adjusted value of the collateral;
 - (b) “C” is the collateral amount;
 - (c) “t” is the lesser of T and the residual maturity of the deposits expressed in years; and
 - (d) “T” is the lesser of 5 and the residual maturity of the loans expressed in years.
- (8) Exposure after risk mitigation is given the risk weight applicable to the counterparty.

93. **Treatment of repo style transactions covered by master netting agreements**

- (1) Bilateral netting agreements covering repo style transactions are recognised for credit risk mitigation purposes if, in all relevant jurisdictions, they—
- (a) are legally enforceable upon the occurrence of an event of default, regardless of whether or not the counterparty is insolvent, bankrupt or under statutory management;
 - (b) give the non-defaulting party the right to immediately terminate and close out all transactions under the agreement upon an event of default, including in the event of insolvency, statutory management or bankruptcy;

- (c) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other, including in situations where the counterparty is insolvent, under statutory management or bankrupt; and
 - (d) allow for the immediate liquidation or set off of collateral upon an event of default, including in the event of insolvency, bankruptcy or statutory management or other similar forms of administration.
- (2) The formula for calculating exposure, taking into account master netting agreements, is:

$$E^* = \max\{0, [(\sum(E) - \sum(C)) + \sum(E_S \times H_S) + \sum(E_{FX} \times H_{FX})]\}$$

- (3) In the formula—
- (a) “E*” is the exposure value after credit risk mitigation;
 - (b) “E” is the current value of the exposure;
 - (c) “C” is the value of the collateral received;
 - (d) “E_S” is the absolute value of the net position in a given security;
 - (e) “H_S” is the haircut appropriate to E_S;
 - (f) “E_{FX}” is the absolute value of the net position in a currency different from the settlement currency; and
 - (g) “H_{FX}” is the haircut appropriate for currency mismatch.

Part 6 – Funds management and securitisation

94. Banks may be involved in funds management and securitisation through activities such as:
- (a) originating or supplying assets to special purpose vehicles;
 - (b) marketing funds management and securitisation products through their branch network;
 - (c) acting as a servicing agent;
 - (d) acting as a fund manager; or
 - (e) sponsoring or establishing such arrangements.
95. Banks may be exposed to risks as a result of their association with funds management and securitisation activities. For the purposes of this policy, “association” means any relationship other than the provision of normal banking or commercial services on a fully arm’s length basis. Some of these risks arise from implicit or “moral” obligations, rather than formal legal obligations. For example, a bank may feel an obligation to provide support to special purpose vehicles set up to conduct securitisation or funds management activities, because it considers that its own reputation and/or customer base will suffer if support is not provided. To the extent that a bank creates a degree of separation between itself and its funds management and securitisation activities, these implicit risks can be reduced.
96. Banks may face more explicit forms of risk where they provide credit enhancements to special purpose vehicles. Examples of credit enhancements include (but are not limited to) the following:
- (a) holding a subordinated class of securities issued by the special purpose vehicle;
 - (b) provision of financial services (e.g. interest rate swaps) on other than arm’s length terms and conditions;
 - (c) provision of risk insurance;
 - (d) provision of guarantees;
 - (e) over-collateralisation;
 - (f) repurchase or replacement of non-performing loans;
 - (g) a one-off gift or a long-term loan, maturing after other securities issued by the special purpose vehicle;
 - (h) payment of expenses incurred by the fund;
 - (i) management fee structures which vary with the level of non performing assets held by a special purpose vehicle or with the capital value of a managed fund such that there is potential for fees to fall to a level which would be below that which the bank would expect to receive if fees were set at market levels on arm’s length terms and conditions.

97. Banks may also face funding risk as a result of involvement in securitisation schemes. This can occur if associated special purpose vehicles issue securities with maturities which are shorter than those of the underlying assets. In such cases there is a risk that the bank will be required to fund some, or all, of the underlying assets when the securities mature.
98. Where a bank is required by generally accepted accounting practice to consolidate a funds management or securitisation special purpose vehicle for the purposes of its group financial statements, the special purpose vehicle must be treated as part of the banking group for the purposes of the capital adequacy framework.
99. Where consolidation of a funds management or securitisation special purpose vehicle is not required for accounting purposes the following treatment will apply for capital purposes. If there is insufficient separation between the bank and associated funds management and securitisation activities, the bank has provided some form of credit enhancement to an associated scheme, or the bank retains funding risk as a result of its involvement in a securitisation, the bank is required to hold capital against the assets of the scheme, in accordance with sections 100, 102 and 105.

Explicit Risk

100. Where a bank provides any form of credit enhancement to an associated special purpose vehicle and if the obligation can be quantified and does not take the form of a guarantee' the bank may choose one of the following three options:
- (a) deduct the maximum level of its obligation to provide support from capital;
 - (b) expense the full amount of its obligation at the time its relationship with the special purpose vehicle commences; or
 - (c) consolidate the assets of the special purpose vehicle for the purposes of calculating its capital adequacy ratios.
- Where the maximum extent of the bank's obligation cannot be readily quantified or where the credit support takes the form of a full or partial guarantee, the assets of the fund should be fully consolidated for capital adequacy purposes.
101. The credit enhancement will be treated as a 100 % risk weighted exposure of the bank where the bank is providing credit enhancements to securitisation special purpose vehicles and:
- (a) the bank and parties related to the bank are not associated with the special purpose vehicle; and
 - (b) the credit enhancement is provided on arm's length terms and conditions and at market prices.

Implicit Risk

102. Where any of the following minimum separation requirements are not met, a bank will be required to fully consolidate the assets of an associated special purpose vehicle for capital adequacy purposes.

- (a) Prospectuses and brochures for funds management and securitisation products must include clear, prominent disclosures of the following:
 - (i) that the securities do not represent deposits or other liabilities of the bank;
 - (ii) that the securities are subject to investment risk including possible loss of income and principal invested; and
 - (iii) that the bank does not guarantee (either partially or fully) the capital value or performance of the securities.

Note however, that these requirements do not override or replace any of the issuer's obligations under the Securities Act and Regulations.

- (b) Unless the bank is treating financial services provided to a special purpose vehicle as a credit enhancement, the bank's disclosure statements must include a statement that financial services (including funding and liquidity support) provided by the bank (and any of its subsidiaries) are on arm's length terms and conditions and at fair value. Where the bank or its subsidiaries have purchased securities issued by a special purpose vehicle during the reporting period, or have purchased assets from a special purpose vehicle, the bank's disclosure statements must include a statement that these were purchased at fair value and on arm's length terms and conditions.
- (c) When securities are initially issued, investors must be required to sign an explicit acknowledgement that the securities do not constitute bank deposits or liabilities and that the bank does not stand behind the capital value and performance of the securities.
- (d) There must either be an independent trustee or there must be clear, prominent disclosure in all prospectuses, brochures and application forms relating to the scheme of whether or not there is a trustee, and, where applicable, that the trustee is not independent of the bank.
- (e) Where the bank or its subsidiaries purchase assets from a special purpose vehicle the purchases must take place at fair value and on arm's length terms and conditions.
- (f) Where the bank or its subsidiaries provide funding or liquidity support to an associated special purpose vehicle, or purchase securities issued by an associated special purpose vehicle, the following conditions must be met:
 - (i) the transactions involved must take place at fair value and on arm's length terms and conditions; and
 - (ii) the funding (including funding provided by purchase of securities issued by the special purpose vehicle) must not exceed 5% of the value of securities issued by the special purpose vehicle.

103. In addition, aggregate funding provided to:
- (a) all associated special purpose vehicles not consolidated in terms of sections 98, 100 or 102 (including funding provided by the purchase of securities issued by a special purpose vehicle); and
 - (b) all affiliated insurance groups (see sections 106 to 114 (Part 7) for further details);

must not exceed 10% of the bank's tier one capital. Where the 10% limit is breached, the full amount of this aggregate funding is required to be deducted from tier one capital (see section 6(2)(f) on deductions from tier one capital).

104. While there is no requirement to hold capital against funds management and securitisation activities where the above minimum separation has been achieved, banks will need to take into account the fact that it is very difficult to totally eliminate implicit credit risk. Thus banks will need to ensure that their capital adequacy policies take account of any residual implicit risk, particularly where funds management and securitisation activities are significant in size relative to the bank's other activities.

Funding Risk

105. A bank may face funding risk as a result of its involvement in a securitisation scheme if the securities issued by the special purpose vehicle have a shorter maturity profile than the assets against which the securities have been issued. Where a bank is subject to funding risk as a result of its involvement in a securitisation scheme it will be required to fully consolidate the securitised assets for capital adequacy purposes.

Part 7 – Insurance business

106. Introduction to Part 7

The role of distributing or marketing insurance products underwritten by affiliated insurance entities may involve an exposure to implicit risk, i.e. to reputational risks and to moral recourse as a result of a close association with those affiliated entities. Implicit risk can be reinforced if explicit support is provided to the insurance entity. To the extent that the banking group and any affiliated insurance entities create a degree of separation between each other, these risks can be reduced.

107. Definitions for Part 7

(1) In this part—

- (a) “insurance entity” means any entity whose business predominantly consists of the conduct of insurance business as defined in registered banks’ conditions of registration;
- (b) “affiliated insurance entity” means any insurance entity which is not a member of the New Zealand banking group, but:
 - (i) which is either the ultimate parent of the New Zealand banking group;
 - (ii) or which is a subsidiary of the ultimate parent of the New Zealand banking group;
 - (iii) or which is an insurance entity in which the ultimate parent of the New Zealand banking group has an interest as an associate, or a direct or indirect interest as a party to a joint venture;
 and whose financial products are distributed or marketed by the New Zealand banking group;
- (c) “affiliated insurance group” means any affiliated insurance entity and all that entity’s subsidiaries.

(2) For the purposes of these definitions, the terms “parent”, “subsidiary”, “associate” and “joint venture” are determined in accordance with generally accepted accounting practice, as defined in the Financial Reporting Act 1993.

108. Credit Enhancements

The full amount of any credit enhancements provided by the banking group to any member of an affiliated insurance group is required to be either fully expensed, or deducted from tier one capital. Examples of credit enhancements include, but are not limited to, the following:

- (a) holdings of, or investments in, equity instruments or subordinated classes of financial instruments;
- (b) provision of exchange rate, interest rate, or other market related contracts for hedging purposes on other than arm’s length terms and conditions (for this purpose, market related contracts which are not traded in an active and liquid market, or whose data inputs are not taken from an active and liquid market, are regarded as credit enhancements);

- (c) provision of funding and liquidity support on other than arm's length terms and conditions;
- (d) guarantees and other risk assumption techniques which provide support for the asset risks of any member of the insurance group (for example, asset credit risks, equity risks, or property price risks), other than market related contracts on arms length terms and conditions;
- (e) asset transfers from the banking group to any member of the affiliated insurance group at less than fair value;
- (f) repurchase or replacement of non-performing assets;
- (g) payment of expenses or liabilities.

Implicit risk – minimum separation requirements

109. Where any of the following minimum requirements are not met, the whole amount of any funding exposures which the banking group has to the affiliated insurance group is required to be deducted from tier one capital:
- (a) Investment statements, prospectuses and brochures for insurance products must include clear, prominent disclosures that the bank and its subsidiaries do not guarantee the affiliated entity which is the issuer of the products, nor any of that entity's subsidiaries, nor any of the products issued by that affiliated insurance group.
 - (b) Where the insurance products are subject to the Securities Act 1978, investment statements, prospectuses and brochures must additionally include clear and prominent disclosures that:
 - (i) the policies do not represent deposits or other liabilities of the bank or its subsidiaries;
 - (ii) the policies are subject to investment risk, including possible loss of income and principal;
 - (iii) the bank and its subsidiaries do not guarantee the capital value or performance of the policies.
 - (c) At initial issue to an insurance product purchaser, the purchaser must be required to sign an explicit acknowledgement that the bank and its subsidiaries do not guarantee the affiliated entity which is the issuer of the products, nor any of that entity's subsidiaries, nor any of the products issued by that affiliated insurance group. Where an insurance product is subject to the Securities Act 1978, the investor must also sign an explicit acknowledgement that the policies do not represent deposits or other liabilities of the bank or its subsidiaries, and that the banking group does not stand behind the capital value or performance of the policies.
 - (d) Asset purchases by the banking group from an affiliated insurance group must take place on arms-length terms and conditions, and at fair value.
 - (e) Unless a bank is treating financial services provided to an affiliated insurance group as a credit enhancement, the bank's disclosure statements must include a statement that financial services (including funding and liquidity support) provided by the bank or any of its subsidiaries are made on arms-length terms

and conditions and at fair value. Similarly, where the bank or its subsidiaries have purchased securities issued by an affiliated insurance group, or have purchased assets from it during the reporting period, the bank's disclosure statement must include a statement that these were purchased at fair value, and on arm's length terms and conditions.

- (f) Funding and liquidity support provided by the banking group to each affiliated insurance group must not exceed 5% of the total consolidated assets of that insurance group, and must be provided on arm's length terms and conditions, and at fair value.
 - (g) Aggregate funding provided to all affiliated insurance groups (see section 107) and to all associated funds management and securitisation vehicles (see sections 94 to 105 for further details) must not exceed 10% of the bank's tier one capital.
110. For the purposes of section 109, funding and liquidity support provided by the banking group to any member of the affiliated insurance group comprises the following items:
- (a) its share of policyholder liabilities;
 - (b) other than for credit exposures arising from market related contracts, any claims which represent senior credit exposures;
 - (c) the undrawn portion of any commitments to provide funding or purchase assets;
 - (d) the full amount of direct credit substitutes.
111. This definition of funding does not include credit exposures arising from the provision of market related contracts used for hedging price movements, such as interest rate swaps, or foreign exchange risk hedging instruments (historical rate rollovers excepted). Nor will it include investments in equity instruments or other classes of subordinated financial instruments, as these are required to be deducted from tier one capital (see section 6(2)(f) and section 108). However, it will include loans, overdrafts, revolving credit lines, money market placements, investments in senior ranking securities, forward asset purchases, guarantees of borrowings, and similar items.
112. In line with the definition of an affiliated insurance group, where there are a number of insurance entities within a group of insurance companies, the funding limits relate to each operating life insurance or general insurance entity (and their subsidiaries) within the group. Therefore, if one operating insurance entity is controlled by another, and the banking group has a marketing role in relation to each of those operating entity's products, the funding requirements apply on a tiered sub-group/group basis.
113. The funding limit does not apply to the holding companies, parents, or other related parties of these affiliated insurance groups, although any credit exposures to those entities are subject to the applicable connected person exposure limits contained in registered banks' conditions of registration. Likewise, all credit exposures to affiliated insurance groups, including funding exposures, are still subject to those connected person exposure limits.

114. Even where the above requirements are met, banks will need to take into account the fact that it is very difficult to totally eliminate the implicit risks that might arise from the marketing of an affiliated insurance group's products. Accordingly, banks should ensure that their capital adequacy policies take account of any residual implicit risk, particularly where the volume of insurance products distributed is significant in relation to the banking group's other activities.

Part 8 – Loan transfers

115. “Clean transfer” required

- (1) Loans transferred from the originator to another party may be regarded as falling outside of the bank’s business if a “clean transfer” of risk has been achieved.
- (2) A clean transfer is achieved if, as a result of the transfer, the bank (or another member of the banking group)—
 - (a) is under no obligation to repurchase the transferred loans;
 - (b) would incur no loss (of interest or principal) in the event of non-performance by the borrower; and
 - (c) would not feel impelled to support the loan in any circumstances.

116. Qualifying transfers

- (1) For the purposes of this Part and subject to the requirements in subsection (2), transfers by any of the following methods will qualify—
 - (a) transfers through novation;
 - (b) transfers by notified assignment;
 - (c) transfers through silent assignment;
 - (d) loan sub-participations.
- (2) A transfer must meet the following requirements:
 - (a) The transfer must not contravene the terms and conditions of the underlying loan agreement and all necessary consents have been obtained.
 - (b) The seller must have no residual beneficial interest in the principal amount of the loan (or that part which has been transferred) and the buyer must have no formal recourse to the seller for losses.
 - (c) The seller must have no obligation to repurchase the loan, or any part of it at any time.
 - (d) The seller must have given notice to the buyer that it is under no obligation to repurchase the loan or support any losses suffered by the buyer and that the buyer has provided written acknowledgement of the absence of obligation.
 - (e) The documented terms of the transfer must be such that if the loan is rescheduled or renegotiated the buyer and not the seller would be subject to the rescheduled or renegotiated terms.
 - (f) If payments are routed through the seller, the seller must be under no obligation to remit funds to the buyer unless and until they are received from the borrower.
 - (g) If the buyer is subject to a trust arrangement, the trustees of that trust must be independent of the seller or companies related to the seller either during or subsequent to the sale negotiations.

117. If a bank transfers undrawn commitments to lend, the commitment should be excluded from the selling bank's risk weighted exposures only if the transfer is by novation or by an assignment accompanied by a formal acknowledgement from the borrower.

Part 9 – Operational risk

118. Introduction to Part 9

This part sets out the methodology for determining capital requirements for operational risk.

119. Definitions for Part 9

- (1) For the purposes of this part, unless the context otherwise requires,—
 - (a) “corporate finance activities”—
 - (i) means those activities that are undertaken primarily to generate non-interest fee-based income;
 - (ii) includes, for example, underwriting, and the provision of advisory services related to mergers and acquisitions or privatisations; and
 - (iii) excludes fee-based income derived from the provision of transaction services related to lending activity and deposit taking;
 - (b) “generally accepted accounting practice” has the same meaning as in the Financial Reporting Act 1993;
 - (c) “legal risk” includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from regulatory actions, as well as private settlements;
 - (d) “operational risk”—
 - (i) means the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events;
 - (ii) includes legal risk; and
 - (iii) excludes strategic risk and reputational risk.
- (2) In sections 121 and 123 accounting terms have the same meaning as under generally accepted accounting practice.

120. Areas of business

- (1) For the purposes of measuring exposure to operational risk, activities must be divided into 2 categories:
 - (a) retail and commercial banking; and
 - (b) all other activities.
- (2) Retail and commercial banking means all “banking book” activities such as lending to households, non-profit organisations, SMEs (small and medium enterprises), sovereigns, financial institutions and corporate customers, and provision of transaction services related to lending activity and deposit taking.

121. Retail and commercial banking

- (1) Capital requirements for operational risk for retail and commercial banking are calculated by multiplying gross retail and commercial loans and advances by a fixed factor.

- (2) Gross retail and commercial loans and advances are defined, gross of allowances for impairment, as:
- (a) loans and advances to retail customers, including purchased retail receivables;
 - (b) loans and advances to small and medium enterprises, including purchased receivables;
 - (c) loans and advances to corporates, sovereigns and financial institutions, including purchased receivables but excluding funded positions arising from corporate finance-related activities; and
 - (d) securities held in the banking book, excluding those that are deducted from capital.

122. All other activities

- (1) Capital requirements for operational risk for all other activities are calculated by multiplying adjusted gross income from other activities by a fixed factor.
- (2) Adjusted gross income from other activities is defined as profit or loss before taxation, excluding:
- (a) net interest income from retail and commercial loans and advances;
 - (b) net fees from the retail and commercial banking area of business, including:
 - (i) net fees from retail and commercial loans and advances (e.g. loan establishment fees, administration fees, and penalty fees);
 - (ii) net fees from retail and commercial transaction accounts; and
 - (iii) net fees from automatic teller machine networks;
 - (c) net impairment losses on assets (including financial assets, intangibles and physical assets);
 - (d) realised profits or losses from the sale of banking book items;
 - (e) income derived from insurance activities;
 - (f) total other operating expenses (including fees paid by the bank to outsourcing providers); and
 - (g) income and expenses from irregular items.
- (3) For the avoidance of doubt, net income a bank obtains from its involvement in securitisation (including servicing), trading,⁵ and corporate finance activities must be included in adjusted gross income from other activities.

123. Calculation of capital requirement

Method of calculation

- (1) The operational risk capital requirement for the retail and commercial banking area of business is calculated by:
- (a) taking the last twelve consecutive quarterly observations of gross retail and commercial loans and advances;

⁵ For trading activities, net income includes profits and losses on instruments held for trading.

- (b) multiplying gross retail and commercial loans and advances at each observation point by 0.525%; and
 - (c) summing the 12 quarterly results produced in paragraph (b) and dividing the resulting sum by 12.
- (2) The operational risk capital requirement for the all other activities area of business is calculated by:
- (a) taking the greater of zero and adjusted gross income from other activities earned over the quarter for each of the last 12 quarters;
 - (b) multiplying the amount derived at each observation point by 18%; and
 - (c) summing the 12 quarterly results determined in paragraph (b) and dividing the resulting sum by 3.
- (3) The total operational risk capital requirement is the sum of the two results determined in subsections (1)(c) and (2)(c).
- (4) If actual observations are not available (for example, when a bank is in its first years of operation), the Reserve Bank will specify an alternative means of determining capital requirements for operational risk, appropriate to the particular circumstances involved.

Formula for calculation

- (5) The formula for calculating the total operational risk capital requirement is:

$$K_{SA} = \frac{\sum_{t=1}^{12} (0.00525 \times LA_t)}{12} + \frac{\sum_{t=1}^{12} \max[(0.18 \times AGI_t), 0]}{3}$$

- (6) In the formula—
- (a) “ K_{SA} ” is the total capital requirement for operational risk;
 - (b) “ LA_t ” is the gross retail and commercial loans and advances measured at the end of each financial quarter;
 - (c) “ AGI_t ” is the adjusted gross income from other activities earned over each financial quarter; and
 - (d) “ t ” is a quarterly observation.

Part 10 – Market risk exposure

124. Introduction to Part 10

This part sets out the methodology for measuring capital requirements for market risk exposure. The methodology measures potential exposure to economic losses arising from adverse movements in interest rates, equity prices and exchange rates.

125. Definitions for Part 10

In this part—

- (a) “aggregate equity exposure” means aggregate exposure to equity risk in all currencies:
- (b) “aggregate foreign currency exposure” means aggregate exposure to foreign currency risk in all currencies other than New Zealand dollars:
- (c) “aggregate interest rate exposure” means aggregate exposure to interest rate risk in all currencies:
- (d) “core rate-insensitive asset” means a rate-insensitive asset, or part thereof, the amount of which does not temporarily increase and decrease with a regular seasonal pattern:
- (e) “core rate-insensitive liability” means a rate insensitive liability, or part thereof, the amount of which does not temporarily increase and decrease with a regular seasonal pattern:
- (f) “core rate-insensitive product” means either or both of a core rate-insensitive asset or a core rate-insensitive liability:
- (g) “equity” has the same meaning as in the New Zealand equivalent to the International Accounting Standards Board Framework for the Preparation and Presentation of Financial Statements, as amended from time to time:
- (h) “equity exposure” means the amount of the change in the economic value of equity instruments that are financial assets and financial liabilities of the banking group in a single currency, which would occur as a result of a change in the price of equity instruments in that currency:
- (i) “equity instrument” has the same meaning as in NZ IAS 32 Financial Instruments: Presentation, as amended from time to time:
- (j) “equity risk” means the risk arising from changes in the prices of equity instruments:
- (k) “financial asset” has the same meaning as in NZ IAS 32 Disclosure and Presentation of Financial Instruments, as amended from time to time:
- (l) “financial instrument” has the same meaning as in NZ IAS 32 Financial Instruments: Presentation, as amended from time to time:
- (m) “financial liability” has the same meaning as in NZ IAS 32 Financial Instruments: Presentation, as amended from time to time:

- (n) “foreign currency exposure” means the change in the economic value of the financial assets and financial liabilities in a single foreign currency that would occur as a result of a change in the exchange rate applicable to that foreign currency:
- (o) “foreign currency risk” means the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates:
- (p) “forward rate agreement” means an agreement to set future borrowing and lending interest rates for a specified period:
- (q) “interest rate exposure” means the change in the economic value of the financial assets (excluding equity instruments) and financial liabilities (excluding equity instruments) in a single currency that would occur as a result of a change in interest rates in that currency:
- (r) “interest rate repricing date” as that term applies to a financial instrument or to a proportion of a financial instrument, means the earlier of:
 - (i) the next interest rate reset date (being the date on which the rate of interest payable in respect of the financial instrument can or will alter); and
 - (ii) the date on which the principal sum is due and payable or, if no principal sum is due and payable, the maturity date of the instrument:
- (s) “interest rate risk” is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates:
- (t) “market risk exposure” means exposure to any, or all, of equity risk, foreign currency risk and interest rate risk:
- (u) “rate insensitive asset” means a financial asset, or part thereof, the amount of which is unlikely to increase or decrease as a result of a material change in market interest rates if the interest rate applicable to that asset (which may be zero) does not change or does not change materially:
- (v) “rate insensitive liability” means a financial liability, or part thereof, the amount of which is unlikely to increase or decrease as a result of a material change in market interest rates if the interest rate applicable to that financial liability (which may be zero) does not change or does not change materially:
- (w) “rate insensitive product” means either or both of a rate insensitive asset or a rate insensitive liability:
- (x) “seasonal rate insensitive asset” means a rate insensitive asset the amount of which temporarily increases and decreases with a regular seasonal pattern: No more than 20% of rate insensitive assets may be treated as seasonal rate insensitive assets:
- (y) “seasonal rate insensitive liability” means a rate insensitive liability the amount of which temporarily increases and decreases with a regular seasonal pattern. No more than 20% of rate insensitive liabilities may be treated as seasonal rate insensitive liabilities:
- (z) “seasonal rate insensitive product” means either or both of a seasonal rate insensitive liability or a seasonal rate insensitive liability.

126. Aggregate Capital Charge for Interest Rate Exposure

- (1) The aggregate capital charge for interest rate exposure is calculated by adding together the absolute values of interest rate exposure in each currency.
- (2) Interest rate exposure in a single currency is the sum of exposure, in that currency, to:
 - (a) directional interest rate risk;
 - (b) vertical disallowance; and
 - (c) horizontal disallowance.

127. Exposure to Directional Interest Rate Risk in a Single Currency

- (1) Exposure to directional interest rate risk in a single currency is derived by subtracting the aggregate change in the value of financial liabilities (excluding equity instruments) arising from a directional change in interest rates in that currency from the aggregate change in the value of financial assets (excluding equity instruments), arising from a directional change in interest rates in that currency.
- (2) The value of a financial instrument is:
 - (a) in the case of an unrecognised financial instrument or a recognised financial instrument which is a market related contract, the face or contract amount of the financial instrument expressed in New Zealand dollars using the relevant spot exchange rate; and
 - (b) in the case of other financial instruments, the carrying amount of the financial instrument expressed in New Zealand dollars using the relevant spot exchange rate.
- (3) The change in the value of a financial instrument is derived by multiplying the value, or proportion of the value, of the financial instrument allocated to each of the applicable time bands specified in Table 10.1 by the risk weight specified for that time band in Table 10.1.

Table 10.1
Risk weights for applicable time bands

<i>Time bands:</i>	<i>Interest rate changes (%)</i>	<i>Risk weights (%)</i>
does not exceed 1 month	1.0	0
exceeds 1 month and not 6 months	1.0	0.3
exceeds 6 months and not 12 months	1.0	0.7
exceeds 1 year and not 2 years	0.9	1.3
exceeds 2 years and not 4 years	0.8	2.0
exceeds 4 and not 6 years	0.7	3.0
exceeds 6 and not 10 years	0.6	3.5
exceeds 10 years	0.6	4.4

- (4) The value of each financial instrument, or a proportion of it, must be allocated to the time bands specified in Table 10.1 in a manner that reflects the date on which the interest rate applicable to the financial instrument, or proportion of the financial instrument, can be reset, or the date at which the principal, or a proportion of the principal, will be paid.
- (5) Despite subsection (4):
- (a) the value of, or the appropriate proportion of the value of, those financial instruments which meet the netting criteria set out in section 128 may be excluded from the application of subsection (4);
 - (b) the aggregate value of all core rate-insensitive assets and of all core rate-insensitive liabilities must be allocated to the time bands specified in Table 10.2 in accordance with the percentages set out in Table 10.2; and
 - (c) the aggregate value of all seasonal rate-insensitive assets and of all seasonal rate-insensitive liabilities must be allocated, in a manner that reflects the dates on which seasonal increases and decreases are expected to occur, to the following time bands:
 - (i) does not exceed 1 month;
 - (ii) exceeds 1 month and not 6 months; or
 - (iii) exceeds 6 months and not 12 months.

Table 10.2
Allocation of the value of core rate-insensitive products
across time bands

<i>Time bands:</i>	<i>Percentage of aggregate value:</i>
does not exceed 1 month	5%
exceeds 1 month and not 6 months	5%
exceeds 6 and not 12 months	10%
exceeds 1 year and not 2 years	20%
exceeds 2 and not 4 years	40%
exceeds 4 and not 6 years	20%

128. **Netting criteria**

- (1) Matched positions may be excluded if either—
- (a) the matched position relates to financial instruments with the same issuer, coupon, currency and maturity; or
 - (b) the matched position is of a kind referred to in, and meets the conditions of, subsections (2), (3) or (4).
- (2) For matched positions comprising futures, the underlying financial instruments to which the futures relate:
- (a) are for the same product;
 - (b) have the same value or notional value;
 - (c) are denominated in the same currency; and
 - (d) mature within seven days of each other.
- (3) For matched positions comprising swaps (including separate legs of different swaps) or forward rate agreements, the underlying financial instruments to which the swaps or forward rate agreements relate:
- (a) are for the same product;
 - (b) have the same value or notional value;
 - (c) are denominated in the same currency;
 - (d) have reference rates (for floating rate positions) which are identical;
 - (e) have coupons which are identical or which do not differ by more than 15 basis points; and
 - (f) have times to run before their next interest rate repricing dates that meet the conditions set out, by row, in Table 10.3.

Table 10.3
Swaps and forward rate agreements

<i>The earliest repricing date:</i>	<i>and the repricing dates are:</i>
does not exceed one month hence	on the same day as each other
exceeds one month and not one year hence	within seven days of each other
exceeds one year hence	within thirty days of each other

- (4) For matched positions comprising forwards, the underlying financial instruments to which the forwards relate:
- (a) are for the same product;
 - (b) have the same value or notional value;
 - (c) are denominated in the same currency; and
 - (d) have residual maturities that meet the conditions set out, by row, in Table 10.4.

Table 10.4
Forwards

<i>The residual maturity:</i>	<i>and the residual maturities are:</i>
does not exceed one month hence	on the same day as each other
exceeds one month and not one year hence	within seven days of each other
exceeds one year hence	within thirty days of each other

129. The Amount of Vertical Disallowance in a Single Currency

- (1) The amount of vertical disallowance in a single currency is the sum of the vertical disallowances for each of the time bands specified in Table 10.1.
- (2) The amount of vertical disallowance in a time band is calculated as follows:
 - (a) derive the risk weighted matched position in the time band (which is either the lesser of the sum of the absolute values of the financial assets and the sum of the absolute values of the financial liabilities in that time band, or, if those sums are equal, that sum, multiplied by the risk weight for that time band);
 - (b) derive the risk weighted value of the rate insensitive products in that time band (which is the sum of the absolute values of the rate insensitive assets and rate insensitive liabilities in that time band multiplied by the risk weight for that time band);
 - (c) if the risk weighted matched position is less than or equal to the risk weighted value of the rate insensitive products in a time band, then the vertical disallowance amount for that time band is the risk weighted matched position multiplied by 20%;
 - (d) if the risk weighted matched position is greater than the risk weighted value of the rate insensitive products in a time band, then the vertical disallowance amount for that time band is:
 - (i) the risk weighted value of the rate insensitive products multiplied by 20%; plus
 - (ii) the difference between the risk weighted matched position and the risk weighted value of the rate insensitive products, multiplied by 5%.
- (3) The vertical disallowance in a currency must have the same sign (positive or negative) as the directional interest rate risk calculated for that currency.

130. The Amount of Horizontal Disallowance in a Single Currency

The amount of horizontal disallowance in a single currency is calculated as follows:

- (a) Allocate the time bands specified in Table 10.1 to the three time zones specified in Table 10.5.

Table 10.5
Time zones

<i>Time bands:</i>	<i>Time zones:</i>
does not exceed 1 month	zone 1
exceeds 1 month and not 6 months	
exceeds 6 months and not 12 months	
exceeds 1 year and not 2 years	zone 2
exceeds 2 years and not 4 years	
exceeds 4 years and not 6 years	zone 3
exceeds 6 years and not 10 years	
exceeds 10 years	

- (b) Calculate the amount of the intra-zone disallowance in each time zone as follows:
- (i) derive the risk weighted net position in each time band (which is the amount of the risk weighted financial assets less the amount of the risk weighted financial liabilities in that time band). If the risk weighted net position in a time band is positive, this is a risk weighted long position and if it is negative, this is a risk weighted short position;
 - (ii) derive the aggregate risk weighted long position in each time zone (which is the sum of any risk weighted long positions in the time bands in that time zone) and the aggregate risk weighted short position in each time zone (which is the sum of any risk weighted short positions in the time bands in that time zone);
 - (iii) derive the matched position in each time zone (which is either the lesser of the absolute value of the aggregate risk weighted long position and the absolute value of the aggregate risk weighted short position in that time zone, or, if the absolute values of those positions are equal, that absolute value), if any;
 - (iv) the amount of intra-zone disallowance in a time zone is the value of the matched position in that time zone multiplied by the disallowance factor for that time zone specified in Table 10.6. If there is no matched position in a time zone, the amount of the intra-zone disallowance in that time zone is zero.

Table 10.6
Intra-zone disallowances

<i>Time zones:</i>	<i>Disallowance factors:</i>
zone 1	40%
zone 2	30%
zone 3	30%

- (c) Calculate the amount of the inter-zone disallowances as follows:
- (i) inter-zone disallowances are derived in the following order: time zones 1 and 2, 2 and 3, and 1 and 3. The inter-zone disallowance factors which must be used to derive the inter-zone disallowance amounts are specified in Table 10.7;

Table 10.7
Inter-zone disallowances

<i>Time zones:</i>	<i>Disallowance factors:</i>
zone 1 and 2	40%
zone 2 and 3	40%
zone 1 and 3	100%

- (ii) derive the residual position in each time zone (which is the net amount of the aggregate risk weighted long position and the aggregate risk weighted short position). If the residual position is positive this is a residual long position and if it is negative this is a residual short position;
- (iii) there is a matched position between time zones 1 and 2 if there is a residual long position in one time zone and a residual short position in the other. The matched position is either the smaller of the absolute value of the residual long position and the absolute value of the residual short position, or, if the absolute values of those positions are equal, that absolute value. If there is no matched position, the amount of horizontal disallowance is zero. If there is a matched position, then the amount of horizontal disallowance between time zones 1 and 2 is the value of the matched position multiplied by the disallowance factor for time zones 1 and 2 specified in Table 10.7;
- (iv) derive the net residual position in time zone 2, by taking the difference between the absolute value of the residual position in time zone 2 and the matched position between time zones 1 and 2, and allocating to that amount, if any, the sign of the residual position in time zone 2. If the net residual position in time zone 2 is positive this is a net residual long position and if it is negative this is a net residual short position;

- (v) there is a matched position between time zones 2 and 3 if there is a net residual long position in time zone 2 and a residual short position in time zone 3 or a net residual short position in time zone 2 and a residual long position in time zone 3. The matched position is either the smaller of the absolute value of those residual positions, or, if the absolute values of those positions are equal, that absolute value. If there is no matched position, the amount of the horizontal disallowance is zero. If there is a matched position then the amount of horizontal disallowance between time zones 2 and 3 is the value of the matched position multiplied by the disallowance factor for time zones 2 and 3 specified in Table 10.7;
- (vi) derive the net residual position in time zone 1 and in time zone 3:
 - (A) in time zone 1, by taking the difference between the absolute value of the residual position in time zone 1 and the matched position between time zones 1 and 2, and allocating to that amount, if any, the sign of the residual position in time zone 1;
 - (B) in time zone 3, by taking the difference between the absolute value of the residual position in time zone 3 and the matched position between time zones 2 and 3, and allocating to that amount, if any, the sign of the residual position in time zone 3;

(if the net residual position in a time zone is positive this is a net residual long position and if it is negative this is a net residual short position);
- (vii) there is a matched position between time zones 1 and 3 if there is a net residual long position in one time zone and a net residual short position in the other. The matched position is either the smaller of the absolute value of the net residual long position and the absolute value of the net residual short position, or, if the absolute values of those positions are equal, that absolute value. If there is no matched position, the amount of horizontal disallowance is zero. If there is a matched position then the amount of horizontal disallowance between time zones 1 and 3 is the value of the matched position multiplied by the disallowance factor for time zones 1 and 3 specified in Table 10.7.
- (d) The amount of the horizontal disallowance in a single currency is the aggregate of the amounts of intra-zone disallowances and inter-zone disallowances in that currency.
- (e) The horizontal disallowance in a currency must have the same sign (positive or negative) as the directional interest rate risk calculated for that currency.

131. **Aggregate capital charge for interest rate exposure for all currencies**

The aggregate capital charge for interest rate exposure is the greater of the absolute value of the sum of any positive interest rate exposures and the absolute value of the sum of any negative interest rate exposures.

132. **Aggregate Capital Charge for Foreign Currency Exposure**

Capital charge for Foreign Currency Exposure in a Single Foreign Currency

- (1) Subject to subsections (2), the capital charge for foreign currency exposure in a single foreign currency is derived by subtracting the aggregate value of financial liabilities (whether recognised or unrecognised) in that foreign currency from the aggregate value of the financial assets (whether recognised or unrecognised) in that foreign currency and multiplying the result by 0.08.
- (2) Financial instruments that have been issued by associates of the registered bank or which have been included in the capital of the banking group must not be included in the calculation of foreign currency exposure.
- (3) The value of a financial instrument is:
 - (a) for options in a single foreign currency, the delta equivalent value;
 - (b) the present value of that financial instrument expressed in New Zealand dollars using the relevant spot exchange rate;
 - (c) for an unrecognised financial instrument, or a recognised financial instrument which is a market related contract, the face or contract amount of the financial instrument expressed in New Zealand dollars using the relevant spot exchange rate; or
 - (d) for any other financial instruments, the carrying amount of the financial instrument expressed in New Zealand dollars using the relevant spot exchange rate.

Aggregate capital charge for foreign currency exposure

- (4) Aggregate capital charge for foreign currency exposure is the greater of the sum of any positive capital charges for foreign currency exposure and the absolute value of the sum of any negative capital charges for foreign currency exposures.

133. **Aggregate Capital Charge for Equity Exposure**

Capital Charge for Equity Exposure in a single currency

- (1) Subject to subsection (2), the capital charge for equity exposure in a single currency is derived by subtracting the aggregate amount of the value of all of the equity instruments (whether recognised or unrecognised) in that currency that are financial liabilities from the aggregate amount of the value of all the equity instruments (whether recognised or unrecognised) in that currency that are financial assets and multiplying the result by 0.08.
- (2) Equity instruments issued by associates of the registered bank must not be included in the calculation of the banking group's equity exposure.
- (3) The value of an equity instrument is:
 - (a) for a net equity futures position, the marked-to-market value of the notional underlying equity position;
 - (b) for a net equity option position, the delta equivalent value;

- (c) for an unrecognised equity instrument, or a recognised equity instrument which is a market related contract, the face or contract amount of the equity instrument expressed in New Zealand dollars using the relevant spot exchange rate; and
- (d) for any other equity instruments, the carrying amount of the equity instrument expressed in New Zealand dollars using the relevant spot exchange rate.

Aggregate capital charge for equity exposure

- (4) The aggregate capital charge for equity exposure is the sum of the absolute values of the capital charge for equity exposures in each currency.

134. Total capital charge for market risk exposure

The total capital charge for market risk exposure is the sum of the aggregate capital charge for equity exposure, the aggregate capital charge for foreign currency exposure and the aggregate capital charge for interest rate exposure for all currencies.